

**Self-Directedness, Personality Type  
And Success in Self-Employment**

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**Submitted in partial fulfillment of  
the requirements for the degree of  
Master of Education**

**Faculty of Education**

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**St. Catharines, Ontario**

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## Abstract

The new economy has spirited a transformation of work organizations from big business structures into smaller, more flexible enterprises, many of which are launched as self-employment initiatives. The growing trend towards increasing self-employment in Canada demands a critical review of how educational programs support and encourage entrepreneurship and self-employment opportunities for students of post-secondary and adult training programs.

The focus of this study was threefold. First, the study examined whether a relationship exists between self-directedness and success in self-employment. Secondly, the purpose of this research was to determine whether a relationship exists between psychological type as defined by Jung and success in self-employment. Finally, this research effort attempted to develop a model for identifying individual potential for self-employment based on combined factors of self-directedness and psychological type.

Success was measured in three stages: 1) Did the subject start a self-employment initiative? 2) Did the business survive six months? 3) Did the business survive one year? The research went beyond classroom training activities to determine whether individuals actually started a business enterprise while participating in a self-employment program designed for individuals who were unemployed. Given that many people initiate a self-employment venture without

actually operating the business beyond the initial start-up, this research effort measured success based on a commitment of at least one year to the self-employment initiative.

Results of the study revealed that individuals with a high level of self-directed learning readiness tended to be more likely to succeed in business in terms of business starts, survival for six months, and survival for one year.

In addition, it was discovered that individuals who were extraverted intuitive types succeeded more often in business at all three levels than any other type. These findings supported a model using the SDLRS and the PET Type Check as predictors for success in entrepreneurial ventures.

## Acknowledgements

I would like to express my sincere gratitude for the help that has been afforded to me by the following individuals: I am extremely grateful to Dr. Patricia Cranton and Dr. Robert Knoop for their guidance, inspiration, and support throughout the creation of this work. In addition, special thanks is extended to Vera Woloshyn for her helpful advice and critical review. The patience and understanding of my husband, Bill, and my children, Willie and Keri, have made this a memorable and rewarding experience.

I am particularly indebted to my clients at the Niagara College Innovation Centre who participated as subjects and made this study possible. They have become my heroes and have earned my complete respect and admiration. Through their initiatives and personal commitment, I have come to understand the true value of the "entrepreneurial spirit."



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## CHAPTER ONE: AN INTRODUCTION TO THE STUDY

### Background of the Problem

As the economy of the new millennium unfolds, small business will be at the forefront of change. The restructuring of the workforce resulting in lower levels of employment and higher levels of self-employment will have an impact on how educational institutions prepare learners for career pursuits. As the need to develop awareness and ability for self-employment becomes a growing factor in education, so will the need to understand the characteristics and learning needs of self-employed individuals.

As Combs (1972) (as cited in Candy, 1991) wrote, " The world we live in demands self-starting, self-directing citizens capable of independent action. The world is changing so fast we cannot hope to teach each person what he/she will need to know in twenty years. Our only hope to meet the demands of the future is the production of intelligent, independent people" (p. 59). More than twenty years later, his words still ring true. As institutional walls break down and methods for transmitting knowledge extend beyond the classroom, self-reliance is becoming a primary goal of education.

The changing landscape of work organizations and the decline in wage employment have created a situation where individuals must become more skilled, more flexible, and more enterprising in developing career pursuits. Leading economists strongly support the transformation of our communities into

enterprising societies in which individuals are encouraged to become self-reliant.

Reich (1991) pointed out that entrepreneurship is not the sole province of the company's founder or its top managers. Beyond the entrepreneurs who start new enterprises, there is a need for entrepreneurial capabilities and attitudes to be diffused throughout the organization. While this research focuses on self-employment initiatives amongst unemployed individuals, the need to develop entrepreneurship across all fields of study is quickly gaining recognition as an employability skill for the new millennium. Employability skills are those which prepare learners to function in a demanding, ever-changing work environment.

According to Coyne (1995), "Most of the growth and all of the jobs in the next decade will be created by companies and industries that do not exist yet" (p. 7). As learners position themselves to undertake any field of study, they must be prepared for the realities of a self-reliant economy. Their learning within any field of study should prepare them for the option of self-employment within that field.

Entrepreneurship education is often the foundation upon which self-employment skills are built. In recent years, millions of dollars have been allocated by the Canadian and Ontario governments for entrepreneurship education and self-employment training. In addition to their importance for self-employment, entrepreneurial skills have become desirable for many occupations. Across all disciplines, individuals are being encouraged to take initiative.

Employers are empowering individuals to become innovators and self-managers.

Throughout North America and across the globe, educational institutions are implementing programs to assist individuals interested in self-employment and small business development to create new enterprises as an alternative to traditional employment. One of the challenges in implementing entrepreneurship and self-employment education in colleges and universities is the need for experiential learning as a primary means of developing the attributes and skills necessary to succeed on one's own in an independent business initiative. Such activities are largely self-directed. As colleges and universities respond to the increasing need for enterprise education, the design of these emerging learning activities must take into account the characteristics of the learners participating and the need for continuous self-management by the learners in actual entrepreneurship or self-employment initiatives.

It is, however, somewhat of an academic hurdle to undertake such activities with individuals who do not possess the characteristics to engage in enterprise development. Although it is desirable to encourage such learning activities in response to growing economic realities, the current designs for entrepreneurship education, which are often classroom-based, may not facilitate the transformation of individuals from dependent learners to enterprising individuals.

The desire to understand whether or not learner characteristics such as self-directedness and personality type relate to success in self-employment and small



business ventures formed the basis of this study.

### Statement of the Problem

The purpose of this study was threefold. First, it was the intent of this study to investigate whether or not a relationship exists between self-directedness and successful self-employment. The study considered self-directedness as a personal characteristic and as a learning process. Self-directedness was measured by the Self-Directed Learning Readiness Scale (SDLRS) developed by Guglielmino in 1977. Successful self-employment was measured by assessing first, whether or not subjects actually started their businesses, second, whether or not they remained in business for a period of six months, and third, whether or not the business survived one year. With a selected group of ten people who met each of these milestones, personal interviews were conducted to discuss the self-directed learning process and to determine if they were personally satisfied with their self-employment situation.

Secondly, it was the intent of this study to examine whether or not personality type is related to successful self-employment. Do individuals of certain psychological types tend to achieve successful self-employment more often than individuals of other types? The PET Type Check developed by Cranton and Knoop (1995 ) was used to assess personality type.

Thirdly an attempt was made to develop a model to identify self-employment potential using Guglielmino's Self-directed Learning Readiness Scale

and the PET Type Check together as possible predictors of success.

Specifically, the following questions were addressed:

1. Does self-directedness relate to success in self-employment?
2. Does personality type relate to success in self-employment?
3. Do self-directedness and personality type together predict success in self-employment?

### Rationale

Self-employment and entrepreneurship have grown at an unprecedented rate in recent years. The ability of educational institutions to provide appropriate training and support in these areas will be contingent upon a clear understanding of the characteristics and learning preferences of the students as well as their learning needs. This study built upon existing research and literature to help determine whether or not relationships exist between self-directedness, personality type and successful self-employment.

The transition towards a small business economy will require ongoing training and education for individuals opting to become self-employed. This is true for younger learners as well as adult learners who have been displaced from employment in the workplace.

Many college and university students have grown up in an environment of educational conditioning that promotes conformity to rules and stifles creativity. Imagine a child being told that "blue is not a Christmas colour." Consider the

number of times that children are expected to find that "one right answer," that "one best solution," that one answer that their teacher recognizes as correct. Many learners have been taught to accommodate the style and expectations of their teachers instead of developing their own learning preferences and maximizing their own potential.

Beyond the institutional walls of academia, the economic outlook has encouraged passivity and resulted in political and social tensions across Canada. As Crane (1992) pointed out, many Canadians have not been able to achieve their expectations for income and quality of life. Productivity is down, social assistance and unemployment costs to the nation are creating a growing burden to Canada's mounting economic debt. Canada faces critical problems of adapting its institutions, policies, and practices to a new environment, one in which innovation and enterprise development are needed to fuel future prosperity.

Effective educational programs are essential for creating a greater awareness of the need for entrepreneurship and to develop skills and abilities that will enable enterprising individuals to transform their ideas into profitable ventures. In order to design learning experiences that contribute to entrepreneurial success, many researchers believe that, first, the individual entrepreneur must be understood. The rationale for this study was to gain further insight into the longstanding, controversial, and complex characterization of the entrepreneur.

## Definition of Terms

1. Self-directed learning: Candy (1991) presented four concepts for self-directed learning which were utilized for the purpose of this study:
  - a) Autonomy - A person may be regarded as autonomous to the extent that he or she conceives of goals and plans, exercises freedom of choice, uses the capacity for rational reflection, has willpower to follow through, exercises self-restraint and self-discipline, and views himself or herself as autonomous.(Candy, 1991, p. 125)
  - b) Self-management - According to Candy (1991) self-management of one's learning refers to "the variable quality of being self-directing within one's field of constraints to free actions" (p. 91).
  - c) Learner control - Simply defined, learner control over one's learning involves "student choice" (Candy, 1991, p. 223).
  - d) Autodidaxy - Autodidaxy is "the individual, noninstitutional pursuit of learning opportunities in the natural societal setting" (Candy 1991, p. 23).
2. Typology: For the purpose of this study, typology refers to Jung's (1971) eight variations of personality type which are as follows: introverted thinking, extraverted thinking, introverted sensing, extraverted sensing, introverted feeling, extraverted feeling, introverted intuitive, extraverted intuitive.

3. Attitude: Jung (1962) defines attitude as follows: "A readiness of the psyche to act or react in a certain direction" (p. 527). The two basic attitudes identified by Jung were introversion and extraversion.

4. Introversion: Jung (1971) defined introversion as follows:

Introversion means an inward-turning of libido (q.v.), in the sense of a negative relation of subject to object. Interest does not move towards the object but withdraws from it into the subject. Everyone whose attitude is introverted thinks, feels, and acts in a way that clearly demonstrates that the subject is the prime motivating factor and that the object is of secondary importance (p. 452).

5. Extraversion: Jung (1971) provided the following definition of extraversion:

an outward-turning of libido (q.v.). I use this concept to denote a manifest relation of subject to object, a positive movement of subjective interest towards the object. Everyone in the extraverted state thinks, feels, and acts in relation to the object, and, moreover, in a direct and clearly observable fashion, so that no doubt can remain about his (sic) positive dependence on the object (p. 427).

6. Functions: Functions are defined as follows: "Thinking refers to the process of cognitive thought, sensation is perception by means of the physical sense organs, feeling is the function of subjective judgment or

valuation, and intuition refers to perception by way of the unconscious (e.g., receptivity to unconscious contents)” (Sharp, 1987, p. 14).

7. Entrepreneur: According to the curriculum guidelines prepared by the Ministry of Education (1990),

An entrepreneur is someone who (a) brings together various resources in order to pursue a venture that addresses some need, want, or problem in an innovative way; (b) sees what others have not seen and has the courage and skill to act on the opportunities perceived; (c) is an ‘agent of change’ who challenges the status quo; and (d) takes controllable risks, which are different from ‘gambles’ ( p. 23).

8. Self-employment: Self-employment is the process in which individuals take the initiative, with or without the help of others, to create their own business enterprise as a form of job creation.
9. Success: Success in self-employment is measured in three stages: first, the entrepreneur has actually started a business venture and has earned gross income in this initiative; second, the entrepreneur has sustained the business for six months; and third, the entrepreneur has sustained the business for one year and the business has become his or her sole or primary source of income; that is, he or she is no longer in receipt of income support from government. In the latter case, income from

employment was not included as a success factor for the purpose of this study.

### Assumptions

1. Self-directed learning is a preferred way of learning for some individuals and not for others.
2. Self-directedness can be learned through educational and/or experiential interventions.
3. Individuals vary in personality characteristics.
4. Personality characteristics can be developed through educational and/or experiential interventions.
5. Self-employment requires a unique type of training that takes into account the individual needs of the participants and the individual nature of their business interests.
6. Success in self-employment is related, at least in part, to self-reliance in terms of income.
7. Potential for entrepreneurial success is rooted in the individual entrepreneur, although additional factors are important.
8. Individuals who undertake self-employment initiatives are entrepreneurs.

### Outline of Subsequent Chapters

Chapter two has three components. First, a review of the literature pertaining to self-directed learning is presented. Next, the reader is provided with

an overview of Jung's theory of psychological type as a basis for individual personality characteristics. Following this is a presentation of studies regarding self-employment and entrepreneurial characteristics.

Chapter three describes the methodology used in conducting the study. A description of the sample, the instrumentation, procedures and data analysis are presented. The limitations and assumptions pertaining to the research are identified.

Chapter four presents the results of the study. First, individuals who scored above average or high on the SDLRS tended to be more likely to succeed in self-employment. As well, individuals who were extraverted intuitive types tended to succeed more frequently in self-employment initiatives.

Finally, in chapter five, a discussion of the results and the practical implications of these findings are presented. The chapter concludes with recommendations for future research pertaining to self-employment education for the long-term unemployed.



## CHAPTER TWO: REVIEW OF LITERATURE

### Introduction

The purpose of this chapter was to review literature pertaining to three distinct areas: 1) self-directed learning; 2) psychological type; and 3) self-employment and entrepreneurship. As well, the literature will be explored to determine whether there are linkages amongst these three concepts that would support a model for predicting orientation towards self-employment.

When asked why they want to start a business of their own, many students of self-employment programs indicate a strong desire to be in control of their own destiny and to have the freedom to learn and grow in directions of their own choosing. In other words, they have a strong desire for autonomy. They often indicate that, in employment situations, they have not experienced these opportunities to any great degree. The desire for self-determination is a repeated theme which has been documented in over 100 personal interviews with clients of the Niagara College Innovation Centre during the period 1992 and 1994.

Self-employment could be described as the ultimate self-directed learning project. It is primarily a self-managed process, with external resources consulted as required by the business. The self-employed operate in an autodidactic system. Learning is a continuum of real experiences often acquired through trial and error.

Given the nature of self-employment, success is based on the entrepreneur's ability to interact with a multitude of external factors. Consider the functions

performed by self-employed entrepreneurs. They are the front line for personal sales transactions, market analysis, sales forecasting, advertising, financial management, and operational management. Many of these functions suggest an extraverted orientation. The business arena is a complex environment with many external factors influencing decisions of entrepreneurs. Their ability to recognize trends in the marketplace and trends in consumer behaviour plays an important role in their business strategies. In other words, they rely on their intuition and analytical abilities to transform visions into enterprise opportunities. Part of the focus of this literature review was to seek out empirical research to determine whether certain personality types are more likely to succeed in these self-employment activities.

### Self-Directed Learning

Perhaps the most comprehensive and thorough review of self-direction in adult education is the work of Philip Candy. According to Candy (1991), the development of self-directed individuals is the goal of most educational endeavours: "Most government policies on education, and many institutional policies as well, stress the development of independence, autonomy, and the ability to control their own affairs as major objectives for learners of all ages" (Candy, 1991, p. 19). He suggested that the need for self-directed citizens has increased with the rapid rate of political, social and technological change in society.

Candy (1991) drew a distinction between self-direction as a process or

method of education and self-direction as a goal or outcome of education. He approached self-direction in learning through four distinct but interrelated concepts. First, he described the concept of personal autonomy as a characteristic or attribute that is "almost universally proclaimed as a goal of education" (Candy, 1991, p.119). Candy's review of literature pertaining to autonomy resulted in a composite definition as follows: "A person may be regarded as autonomous to the extent that he or she conceives of goals and plans, exercises freedom of choice, uses the capacity for rational reflection, has willpower to follow through, exercises self-restraint and self-discipline, and views himself or herself as autonomous" (Candy, 1991, p. 125). Candy suggested that some aspects of personal autonomy are more amenable to educational intervention than others. For instance, some characteristics, such as perseverance, are partly innate or rooted deeply in people's very earliest experiences, while other components of autonomy, for instance the ability to rationally reflect, may be taught as curricular content (Candy, 1991). Several instructional techniques have been linked with autonomy, including collaborative learning, contract-based learning, individualized instruction, open learning, problem-based learning, and independent study.

The second concept of self-direction Candy (1991) described as self-management of one's learning and education, "the variable quality of being self-directing within one's field of constraints to free actions" (p. 91). Here, personal choice and personal responsibility for those choices are important elements of self-

direction. But Candy also suggested that self-directedness is situation-specific rather than generic. Individuals may possess the ability to manage their own learning in one situation, but may not be so able in a different context.

The third concept is learner control of one's learning. According to Candy (1991), "there seems to be some evidence that prolonged exposure to techniques of instruction that emphasize high degrees of learner-control can increase people's competence at, and preference for, independent inquiry" (p. 223). He cautioned, however, that the transition can be challenging for both the teacher and the learner. For persons whose entire academic experience has been organized for them, the transitional process can be lengthy and unsettling. As well, from the teacher's perspective, the introduction of student choice is likely to require an adjustment in roles.

Finally, Candy proposed the concept of autodidaxy. He described autodidaxy as "the individual, noninstitutional pursuit of learning opportunities in the natural societal setting" (Candy 1991, p. 23). Autodidaxy is self-directed learning that takes place outside of an institutional setting and often occurs without conscious effort. He suggested that it is only through autodidaxy that a learner is in complete control. To some degree, everyone engages in autodidaxy, and it can be developed and fostered.

Candy suggested two broad approaches for developing such abilities and competencies: (1) teaching such things as data gathering, critical thinking, goal

setting, organizational skills, and (2) providing experiences in which individuals are given opportunities to be self-directed and responsible for their own actions, for example through contract-learning.

Over the past quarter century, there has been a proliferation of literature pertaining to self-directed learning. As Candy (1991) indicated, "almost every book published in English on adult education in the past decade has dealt somewhere or other with the question of adult self-direction..." (p. 26). Yet, the concept of self-education was a primary mode of learning prior to the development of schools. Kulich (1970) (as cited in Brockett & Hiemstra, 1991), illustrated several examples of self-education over centuries. Alexander the Great studied the writings of Homer; Caesar also partook in daily study; Newsom (1977) examined the role of "self-directed lifelong learning" in London between the years 1558 and 1640. Benjamin Franklin is considered the patron saint of adult education in the United States. Among the wealthy of colonial America, libraries were prominent.

The vast research relating to self-direction has resulted in a multitude of definitions of the term. Self-directed learning has been described as a characteristic or trait of adults and as a process of learning that involves individual responsibility or choice. As pointed out by Cranton (1992), however, regardless of its popularity in educational practice and research, self-directed learning has remained poorly defined, and the nature of the process of developing self-

directedness requires further investigation.

While self-directed learning is a valued phenomenon in adult education, as a learning process, it is not for everyone. Knowles (1975) suggested that such developments in education as independent study, nontraditional study programs, and universities-without-walls place a heavy responsibility on students to take initiative. He further suggested that students in these learning environments who lack self-directed inquiry will experience difficulties such as anxiety, frustration and even failure. This is especially true for adult learners who have been exposed to a lifetime of traditional, more structured, learning strategies.

According to Knowles (1975), "self-directed learning usually takes place in association with various kinds of helpers, such as teachers, tutors, mentors, resource people and peers" (p. 18). Entrepreneurs or self-employed individuals may in effect practise a form of self-directed learning in their efforts to develop a business of their own. Much of their learning is experiential and the nature of their career choice requires them to be resourceful and personally responsible. Many entrepreneurs, however, participate in networking activities, strategic alliances, or mentoring relationships that provide technical business support and personal motivation.

Knowles (1975) suggested that self-directed learners are motivated by internal incentives and are characterized as achievement-oriented, growth-oriented, and curious. Who would be more curious than the inventor, the innovator, the

creator of new products, processes and services? Achievement-motivation has also been strongly linked to entrepreneurs throughout the literature.

Tough (1979) suggested that individuals may be especially likely to choose self-planning if they are self-reliant, independent and autonomous. During such self-planned projects, the learner typically interacts with several individuals and objects relevant to the planned activity or project. Resources may include friends, family, books, even television programs. This process of self-planning, of identifying and utilizing resources is also often typical for individuals whose learning project is a self-employment initiative.

Most people who choose self-employment as a career option do so as a means of self-reliance. Another primary motivator, especially for inventors, is the challenge and reward of creating something new. According to Tough (1979), learners may choose self-planning if they "expect to discover, invent or synthesize knowledge and skill because no-one else has yet done so" (p. 94). Based on Tough's observations, self-directed learning may be a natural choice for entrepreneurs.

Brockett and Hiemstra (1991) suggested that the idea of self-directed learning has undergone considerable evolution over the past several years. In their view, self-direction in learning refers to two distinct but related dimensions: the first dimension, self-directed learning, involves characteristics of the teaching-learning transaction. This is the more common dimension discussed in the

literature, especially in early writings by Knowles (1975) and Tough (1979). The second dimension, learner self-direction, refers to personality characteristics of the individual. According to Brockett and Heimstra (1991), learner self-direction, as a characteristic, involves a predisposition toward taking responsibility for personal learning endeavours.

Cranton (1992) defined self-directed learning as, “ the process of voluntarily engaging in a learning experience, being free to think or act as an individual during that experience, being free to reflect on that experience, and being able to discern change or growth as a result of the experience, regardless of the setting in which it occurs” (p. 56). This definition is much less confounding than many others. It offers a framework for designing self-directed learning activities with the definitive factor being individual choice.

Clearly, throughout the literature, similarities appear in terms of characteristics and learning strategies identified for self-employed individuals and self-directed learners. This study attempted to demonstrate whether a relationship exists between success in self-employment and the learner’s self-directedness.

#### Measurement of Self-Directed Learning

One of the instruments used in research pertaining to self-directed learning is the Oddi Continuing Learning Inventory (OCLI). This instrument was designed to identify the personality construct, self-directed learning. The OCLI is a self-report instrument including 24 items. It was developed by Oddi in 1986.



According to Oddi, Ellis, and Altman Roberson (1990), “items for the instrument were developed around three theoretical formulations describing the motivational, affective, and cognitive attributes of the self-directed continuing learner’s personality: Proactive Drive versus Reactive Drive, Commitment to Learning versus Apathy/Aversion to Learning, and Cognitive Openness versus Defensiveness” (p. 139). Limited reports were available in the literature to support the use of the OCLI for this study.

The instrument most utilized in research regarding self-directed learning was developed by Guglielmino in 1977. Her Self-Directed Learning Readiness Scale (SDLRS) was developed with a panel of 14 experts in the field of adult education. The Delphi technique was used to arrive at a consensus among these experts regarding the characteristics of self-directed learners (Guglielmino, 1989). The scale consists of 58 items on a Likert scale. According to Guglielmino (1989), eight factors are present in the scale: (1) self-concept as an effective learner; (2) openness to learning opportunities; (3) initiative and independence in learning; (4) acceptance of responsibility for one’s own learning; (5) love of learning; (6) creativity; (7) ability to use basic study skills and problem-solving skills; and (8) positive orientation to the future.

The SDLRS has received several criticisms. According to Brookfield (1985) the SDLRS is a questionable measure of readiness with “adults of little formal education or with adults who have used fellow learners as the primary

source of information in their explorations of knowledge and skill areas” (p. 13).

Brookfield expressed concerns over the use of formalized measures of self-directed learning, suggesting that they may be intimidating for learners.

Brookfield also cited criticism of the SDLRS from Brockett (1984) with regards to level of education: “The SDLRS is suited to measuring the readiness for self-directed learning of adults who have an average or above-average level of formal education.” (Brookfield, 1985 , p. 12). In particular, Brockett (1984) indicated problems relating to the reading level of the scale. Guglielmino adapted the scale to suit the needs of lower educated adults in response to Brockett’s criticism.

Field (1989) criticized the validity and reliability of the SDLRS.

According to Field (1989), “statistical analyses that address the scale’s validity have been characterized by superficiality and a failure to demonstrate a strong association between the construct measured by this scale and other related constructs” (p. 126). He claimed that the growth of research using the SDLRS has “given the misleading appearance to many of its users that the scale’s validity has been adequately demonstrated” (1989, p.127) . Field suggested four areas of Guglielmino’s research have implications for the reliability and validity of the scale. First, Field did not consider the Delphi technique to be appropriate for generating the scale items. Second, he criticized the lack of definition of the terms readiness and self-directed learner. Third, he claimed that for negatively phrased items, a high response score was taken to indicate low self-direction. According to

Field, the retention of negatively phrased items is a major source of invalidity in the scale. Finally, Field questioned the incorporation of additional items after the scale had been validated. "Since Guglielmino completed the developmental work which led to a 41-item version of the scale, 9 of these 41 items have been eliminated, and an additional 26 items have been added to form the current 58-item version of the SDLRS" (p. 129). According to Field, the reliability coefficient of 0.87 was based on the original scale and does not apply to the 58-item version. He concluded that the use of the SDLRS was inappropriate for indicating readiness for self-directed learning due to methodological and conceptual flaws.

Guglielmino (1989) responded to Field's critique of the SDLRS, suggesting that "the number of inaccuracies contained in Field's article calls into serious question the credence that can be given to his findings"(p. 235). She addressed his criticism of the use of the Delphi technique by explaining that it was not used as a means of selecting items, rather, it was used to arrive at a consensus on "the characteristics of the self-directed learner that appear to be most closely related to his [sic] self-direction in learning" (Guglielmino, 1977/78 p. 92, as cited in Guglielmino, 1989, p. 236). Guglielmino suggested that the responses of the panel of experts reflected the depth and breadth of their experience with self-directed learners.

In response to Field's criticism regarding the lack of definition of "self-directed learner," Guglielmino indicated that the term is defined by the Delphi

panel, which was a major purpose of the study. According to Guglielmino, this procedure was selected to ensure construct validity for the scale. Guglielmino explained that the term “readiness” reflects a “developable capacity in normal individuals to some extent” (p. 236). Further, she suggested that readiness exists along a continuum and is present in everyone to some degree.

Guglielmino addressed Field’s criticism of the negatively phrased items, indicating that the scale includes some negatively phrased items for which strong agreement indicates high self-direction. She cited the example, “Difficult study doesn’t bother me if I am interested in something” (p. 237). As well, some positively-phrased items such as, “I expect the teacher to tell all class members exactly what to do at all times,” require a low response to indicate a high level of readiness for self-directed learning (Guglielmino, 1989, p. 237).

With regards to Fields’s criticism of items added to the original scale, Guglielmino asserted that the 17 items were added after the initial field test, not after validation of the scale. According to Guglielmino, a new factor analysis was done in 1978 based on the use of the 58-item scale. Guglielmino pointed to the large body of research supporting the validity and reliability of the SDLRS. At least 17 studies have examined the validity of the scale. Guglielmino indicated that “a meta-analysis of 29 studies using the scale provides further evidence of its validity, revealing positive associations with self-directed learning activity (.27), autonomy (.22), and growth orientation (.22) and a negative relationship with

dependence (-12)” ( McCune, Guglielmino, & Garcia, 1989, as cited in Guglielmino, 1989, p. 238). These correlations were not very high, however, and can be criticized further on that basis. Guglielmino concluded that Field’s paper was filled with errors of omission and commission.

Long (1989) concurred with Guglielmino, suggesting that Field’s research report “is sufficiently marred by flaws to question the reported conclusion, that is, the SDLRS is not an indicator of readiness for self-directed learning”(p. 240).

Long questioned Field’s criticisms which were “based solely on correlations of the scale items on a sample of 244 students” (1989, p. 242). Further, Long indicated that several studies which analyse the scale were ignored in Field’s report.

Torrance and Mourad (1979) ( as cited in Long, 1989) provided an analysis of the 58-item scale. “The study, based on principal component analyses, identified eight factors similar to the ones identified by Guglielmino (1977/78)” (p. 241).

Torrance and Mourad’s study supported the validity of the SDLRS. Long (1989) also noted the absence of another important study supporting the validity of the SDLRS: “He [Field] fails to report the detailed study conducted by Finestone (1984/86) who concluded: ‘...results of empirical and observational data lend support to the claims that the SDLRS is valid’” (p.241). Long (1989) concluded that continuing study of the SDLRS should be encouraged.

McCune (1989) also countered Field’s criticisms, indicating that Field administered a modified version of the SDLRS, then proceeded to discuss his

research findings as if they were based on the original scale. In addition, she suggested that Field's criticisms of Guglielmino's factor analysis were incorrect, explaining that Guglielmino had correctly used an exploratory factor analysis in developing the SDLRS. McCune concluded that use of the SDLRS should be encouraged, dismissing Field's findings as unreliable and invalid.

### Jung's Psychological Type Theory

This section of the literature review provides a general description of Jung's psychological type theory. Jung based his type theory on twenty years of work as a psychiatrist during which he came to believe that individual differences in personality were not random occurrences but, rather, recurring patterns of behaviour. Initially, Jung (1962) identified two basic types of people which he termed introverted and extraverted. Each is distinguished by the direction of psychic energy in the libido, or their attitude toward the object. He referred to attitude as "a readiness of the psyche to act or react in a certain direction" (p. 526). These basic attitudes are found in everyone in varying degrees. Individuals possess both introversion and extraversion. Individuals are not pure types. A typical attitude indicates the dominance of one mechanism, but not to the total exclusion of the other.

According to Jung (1962) (as cited in Sharp, 1987), introversion "is normally characterized by a hesitant, reflective, retiring nature that keeps itself to itself, shrinks from objects [and] is always slightly on the defensive" (p. 13). The

introvert attempts to prevent the object from gaining power over him/her. In other words, introverts move toward the subject, "towards a person's own psyche" (Cranton & Knoop, 1995, p. 3). Introverts are uncomfortable in large social gatherings and most content when alone.

In contrast, the extravert has a positive relation to the object. "Extraversion is characterized by the interest in the external object, responsiveness, and a ready acceptance of external happenings, a desire to influence and be influenced by events, a need to join in and get 'with it,' the capacity to endure bustle and noise of every kind, and actually find them enjoyable, constant attention to the surrounding world, the cultivation of friends and acquaintances, none too carefully selected, and finally by the great importance attached to the figure one cuts, and hence by a strong tendency to make a show of oneself" (Jung, 1971, p. 549).

Jung noted that there are individuals who show little differentiation in their attitudes. These individuals are influenced by external happenings as well as their own internal world. For these undifferentiated individuals, no particular attitude can be attributed.

As well as attitudes, Jung (1962) identified four distinct functions: thinking, feeling, sensing and intuition. He described a function as a form of "psychic activity that remains the same in principle under varying conditions" (p. 436). As a means of summarizing their meanings, each function was described by Jung

as follows: "Sensation tells you that something exists; thinking tells you what it is; feeling tells you whether it is agreeable or not; and intuition tells you from whence it comes and where it is going" (Jung, 1964, p. 61). Functions do not develop to the same extent simultaneously. Generally, one function is more developed than the others and tends to dominate: "It is a fact of experience that all the basic psychological functions seldom or never have the same strength or grade of development in one and the same individual" (Jung, 1962, p. 434).

As with attitudes, functions may also be undifferentiated. Knoop (1994) suggested that a lack of differentiation "signifies a fusion and merger of the functions with one another" (p. 18). He suggested that, among other things, this can lead to ambivalence, inhibitions and a lack of direction.

Jung distinguished two functional categories: rational and irrational. Rational functions include thinking and feeling. These functions use reason and reflection: "Thinking and feeling are rational functions in so far as they are decisively influenced by the motive of reflection. They attain the fullest significance when in fullest possible accord with the laws of reason" (Jung, 1962, p. 584). According to Jung, the thinking function uses logic and reasoning to produce judgements. The feeling process imparts value to an object or event in terms of acceptance or rejection.

Irrational functions do not involve decision making or judgements. They are grounded exclusively in perception. Irrational functions include sensation and



intuition. Sensing is defined as “perception transmitted via the sense organs and ‘bodily senses’” ( p. 586). Jung described intuition as “that psychological function which transmits perceptions in an unconscious way”(p. 567). He went on to say that intuition has a peculiar quality: “it is neither sensation, nor feeling, nor intellectual conclusion, although it may appear in any of these forms. Intuition is a kind of instinctive apprehension, irrespective of the nature of its contents” ( p. 568).

Together, the dominant attitude and primary function combine to form the foundation of an individual's personality. Jung identified eight psychological types: extroverted thinking, introverted thinking, extroverted feeling, introverted feeling, extroverted sensing, introverted sensing, extroverted intuitive, and introverted intuitive.

Knoop (1994) described the psychological types. Extraverted thinking types (ETs) make decisions based on information collected from the world around them. They judge people and objects according to a strong set of principles. The ETs prefer logic and order and are sometimes viewed as cold and impersonal. At times, they are considered idealists. The ETs tend to be positive, productive, confident, creative and orderly. Their actions are dependent on intellectual conclusions. Their creative ability enables them to develop new concepts, new processes and new applications.

Introverted thinking types (ITs) are concerned with developing and

presenting new ideas. They prefer working with theories rather than practical applications. They like logic and order and need solitude. The ITs are often perceived by others to be arrogant or cold. They may disregard the opinions of others, even lack awareness of others. The ITs live by strong, inner principles.

Extraverted feeling types (EFs) bring harmony to their world, creating a friendly, warm, pleasant atmosphere. It is the EF who remembers birthdays, gets the party going, resolves conflicts, organizes social outings. They are appreciated by others, viewed as caring and pleasant.

Introverted feeling types (IFs) are often misunderstood. They prefer to exist in their own inner world. The IFs tend to be silent and difficult to understand. They have trouble expressing themselves and experience difficulty in establishing close relationships. The IFs possess strong values and depth of feeling.

Extraverted sensing types (ESs) are drawn to tangible things, discernible things. The ESs are the most realistic of the types and have little patience for the abstract. They are very aware of the world around them. Facts and experiences perceived with their five senses form the basis of their reality. The ESs enjoy good food, material possessions and beautiful people.

Introverted sensing types (ISs) view the world according to their own perceptions. They perceive the smallest details of events through their senses, but modify these perceptions based on their unconscious dispositions. The IS types prefer quiet and routine and like to tend to details. They are sensitive to people

and objects. However, they often appear to others to be inaccessible.

Extraverted intuitive types (ENs) are visionaries who seek out new possibilities, new opportunities. Their dependence on external conditions is primarily an unconscious process. Their unconscious actively creates and shapes their vision. They enter new situations with great enthusiasm, but bore easily with routine. They tend to abandon projects, allowing others to reap the benefits of their initiative. According to Jung (1962), "if well-intentioned, with an orientation to life not purely egoistical, he [sic] may render exceptional service as the promoter, if not the initiator of every kind of promising enterprise" (p. 611).

Introverted intuitive (IN) types are often characterized as dreamers. Their capacity for predicting future trends is focused inwardly and often lacks connection with realities of the outer world. They may appear unorganized and indifferent to others.

Personality is also influenced by an "auxiliary" function or secondary function. Types do not operate in pure form. According to Jung (1962), if the dominant function is rational, that is thinking or feeling, then the auxiliary function must be irrational, sensing or intuition. Likewise, a dominant irrational function would be complemented by a rational auxiliary function.

This study attempted to assess whether or not personality type is related to success in self-employment. There was some indication in the literature that extraverted thinking types may be well suited for self-employment: "At their best,

extraverted thinkers are statesmen, [sic] lawyers, practical scientists, respected academics, successful entrepreneurs" (Sharp, 1987, p. 45). Extraverted intuitives, by their nature, may also be drawn to self-employment as a career opportunity. "Extraverted intuition is constantly on the lookout for new opportunities, new fields to conquer" (Sharp, 1987, p. 61). "Such people (extraverted intuitives) are nevertheless indispensable in the areas of culture and economics. Their peculiar talents suit them well for professions where the ability to see possibilities in external situations is of great value. They are found among captains of industry, innovative entrepreneurs, speculative stockbrokers, visionary statesmen, [sic] etc." (Sharp, 1987, p.61). On the other hand, Sharp cautioned that extraverted intuitives will spend their energies on possibilities, without reaping the benefits of their work. "They have a vision of what could be, but can't be bothered to implement it. Typically, they get a business off the ground and leave it on the brink of success; hence others often reap where they have sown" ( p. 63). Knoop (1994) included, in a description of the EN type, Jung's observation that ENs often choose, among other occupations, to be entrepreneurs.

### Self-employment and Entrepreneurship

Self-employment is a process in which individuals take the initiative, with or without the help of others, to create their own business enterprise as a form of job creation. This has become a more and more popular form of employment in Canada in recent years. Between 1990 and 1992, when 385,000 employees lost

their jobs in Canada, the number of self-employed Canadians increased by 56,000. Between 1992 and 1994, employers hired 240,000 people, a gain of 2.3 percent, while self-employment in Canada grew by 171,000, a gain of 9.4 percent (Globe and Mail, January 16, 1995).

Balderson (1994) noted that, during the past recessions, many individuals lost their jobs, and many college and university graduates who were unable to secure employment, chose to start businesses of their own. According to Balderson, 97 percent of all businesses operating in Canada are small businesses. The long recession of the early 1990s appears to have convinced many new self-employed individuals that dependence on big business for employment security is a thing of the past. Small business is the way of the future, and employment security is in the hands of individuals who have the ability to develop their own enterprises.

The literature does not clearly distinguish between the terms self-employment and entrepreneurship. It is assumed here that self-employed individuals are entrepreneurs. For the purpose of this study, self-employed means "individuals who start a business venture to create their own source of employment."

There are probably as many definitions of entrepreneurship as there are types of businesses. According to Kuratko and Hodgetts (1992), the word entrepreneur is derived from the French word entreprendre, meaning "to

undertake" (p. 3). They defined an entrepreneur as "an innovator or developer who recognizes and seizes opportunities; converts those opportunities into workable/marketable ideas; adds value through time, effort, money, or skills; assumes the risks of the competitive marketplace to implement these ideas; and realizes the rewards from these efforts" (p. 3). Hutt (1988) defined entrepreneurship as "the act or process of getting into and managing your own business enterprise" (p. 3). An entrepreneur is defined in Entrepreneurship Studies (1990) as "someone who (a) brings together various resources in order to pursue a venture that addresses some need, want, or problem in an innovative way; (b) sees what others have not seen and has the courage and skill to act on the opportunities perceived; (c) is an 'agent of change' who challenges the status quo; and (d) takes controllable risks, which are different from 'gambles'" (p. 23). Again, it is suggested that individuals who develop their own enterprises satisfy the criteria in this definition.

Ronstadt (1984) has compiled many definitions of entrepreneurship. Ronstadt (1984) defined entrepreneurship as "the dynamic process of creating incremental wealth. This wealth is created by individuals who assume the major risks in terms of equity, time, and/or career commitment of providing value for some product or service. The product or service itself may or may not be new or unique, but value must somehow be infused by the entrepreneur by securing and allocating the necessary skills and resources" (p. 28). Based on all of these

definitions, it is suggested that self-employment is an entrepreneurial endeavour.

While numerous other definitions exist in the literature, it is not the intent here to review that literature.

### Characteristics of Entrepreneurs

The curriculum guideline for Entrepreneurship Studies prepared by the Ministry of Education in Ontario (1990) suggested the following characteristics of entrepreneurs: goal-directed, self-motivated, self-confident, perceptive, creative, realistic, persevering, self-disciplined, achievement-oriented, interdependent, flexible, able to maintain good health and a high energy level, and rational risk-takers with a need for ongoing feedback.

Many studies have focused on entrepreneurial characteristics. Hornsby, Naffziger, Kuratko, and Montagno (1993) cited several studies and literature reviews (Brockhaus, 1982; Brockhaus & Horwitz, 1986; Sexton & Bowman-Upton, 1986; Wortzman, 1986; Knight, 1987; Neider, 1987; Gartner, 1988) pertaining to individual characteristics of entrepreneurs and successful business managers. Characteristics such as locus of control, moderate risk-taking propensity, tolerance of ambiguity and need for achievement have been consistently supported in the literature as important factors in the decision to start a business (Cachon & Cotton, 1987). Additional characteristics considered to be important for entrepreneurs include a high energy level, a need for autonomy, and a desire to build something on their own. They are also persistent.

The Wonderlic Entrepreneurial Quotient (EQ) measures thirteen traits which are categorized into three dimensions including adaptability, managerial traits and personality traits. The personality traits examined were based on Jungian theory. The traits identified for successful entrepreneurs included extraversion, intuition, logic, and option orientation. The Entrepreneurial Quotient suggests that entrepreneurs need the cooperation and support of other people in achieving their strategies which gives extraverts an edge over introverts. As well, it suggests that entrepreneurs are idea people who follow their instincts and prefer to work with concepts rather than data. According to the EQ, entrepreneurs tend to balance their head with their heart when it comes to making decisions. The EQ data indicated that successful entrepreneurs prefer to keep options open but closure is also important.

Kee and Chye (1993) conducted a study to identify the key personality characteristics associated with entrepreneurs. Based on their review of the literature, selected characteristics were tested against a group of entrepreneurs, futures traders at the Singapore International Monetary Exchange (SIMEX). The characteristics studied included need for achievement, internal locus of control, moderate risk-taking propensity, tolerance for ambiguity, self-confidence, determination and drive, and self-discipline. The study was aimed at examining the relationship between these characteristics and success of this entrepreneurial group at SIMEX. These traders came from diverse backgrounds and were



considered independent one-person enterprises.

In the first part of Kee and Chye's (1993) study, the personality characteristics of the sample were measured. The survey instrument used was a self-administered, fixed-alternative questionnaire adapted from Ho and Wortman (1989) (as cited in Kee & Chye, 1993). Section I of the questionnaire contained statements selected from the Entrepreneurial Self-Assessment Scale in the Entrepreneur's Handbook (1981) as cited in Kee & Chye, 1993) to measure the characteristics identified above. Self-discipline was also included because it was rated as very important for success in trading by all the participants in a pilot survey. A five-point Likert scale was used to indicate the respondents' degree of agreement or disagreement to each statement. Five statements were included for each of the characteristics measured. The questionnaire was distributed to the traders with a covering letter describing the nature and purpose of the survey and assuring respondents of the confidentiality and anonymity of their responses. A total of 134 responses were received (103 from current traders and 31 from former traders who had left to pursue other careers).

The mean and standard deviation were calculated for each of the personality characteristics measured. Mean scores were also calculated for traits perceived by the traders as important to their success. Internal locus of control with a mean of 19.61 ranked highest. Need to achieve ranked second with a mean of 19.33. Determination and drive ranked third with a mean of 18.71. Next, self-discipline,

risk-taking propensity, and self-confidence had means of 18.51, 18.20 and 17.89 respectively. A high tolerance for ambiguity ranked seventh with a mean of 14.11. Kee and Chye attributed this latter finding to the structured work environment of the traders.

Given a range of 5 to 25, all of the personality characteristics, with the exception of high tolerance for ambiguity, were scored at the higher end. Kee and Chye (1993) noted that this was consistent with the entrepreneurship literature. The researchers suggested that their results implied that the trader, "like other entrepreneurs, is an individual who prefers to set his own goals and is driven by his [sic] need for achievement to attain these goals through his [sic] efforts (as opposed to luck/fate/external circumstances)" (Kee & Chye, 1993, p. 64).

In the same study, the traders were next asked to identify characteristics which, in their opinion, a person should possess to be successful as a trader. The characteristics were rated on a scale of 1 to 5 with 5 being the highest score. The mean scores indicated that the characteristics associated with entrepreneurs in the literature were also perceived by the traders as important. Self-discipline was ranked highest with a mean score of 4.83. Determination and drive ranked second with a mean score of 4.50. Self-confidence ranked third with a mean score of 4.42. Risk-taking propensity, tolerance for ambiguity, and need for achievement had means of 4.37, 4.01 and 3.90 respectively. The researchers noted that while the traders recognize the importance of self-discipline for success in trading, they

may not have possessed it.

The third part of the study compared the profile of successful traders, that is, those who were actively trading, to that of less successful traders, those who had left SIMEX to pursue other careers. Using the t-test and Wilcoxon rank sums test, p-values were calculated. Results of both tests indicated that the mean scores for need for achievement, determination and drive, and tolerance for ambiguity were significantly different ( $p = 0.05$ ) between successful traders who stayed and less successful traders who had left. No significant difference in means was found in the other attributes. Kee and Chye concluded that this implies that successful entrepreneurs are not distinguished by their locus of control or risk-taking propensity. Neither are they more self-confident or self-disciplined. They do, however, have a higher need for achievement and greater determination and drive than the less successful traders who left SIMEX. Successful traders appeared to have a significantly higher tolerance for ambiguity than their less successful counterparts. The results of a stepwise Logit procedure performed to determine the personality characteristics that best predict success in trading indicated that the best predictors were tolerance for ambiguity, and determination and drive.

The researchers concluded that it would appear that personality characteristics alone cannot predict or explain entrepreneurial success well. They suggested that the impact of other factors such as the entrepreneur's background and work experience, and the influence of environmental factors must also be

considered.

Cachon and Cotton (1987) conducted a study of third-year commerce students at Laurentian University who were participating in a course project involving business plan development. The aim of the study was to verify whether a model of entrepreneurial characteristics constructed from those identified in the literature would predict an individual's orientation toward entrepreneurship and thus his/her potential for self-employment.

Initially, nine key variables were identified including the dependent variable, entrepreneurial orientation. Only six scales used in the study showed reliability and were retained for the model of individual student entrepreneurial orientation. The retained independent variables (predictors) included the Locus of Control Measure developed by Neal and Seeman in 1964; the Choice-Dilemma Procedure developed by Kogan and Wallach in 1964; Perceived Attitude Toward Risk-Taking; Personal Objectives Perceived as Being Fulfilled by the Business Development Project; and Perceived Effectiveness of Level of Tutor Support.

Subjects participating in the study were 88 third-year undergraduate business students formed into groups of three to five participants. The mean age was 22 years, with a range from 20 to 30 years. Of the subjects, 48 were male and 40 were female.

The students were required to identify a business opportunity for which there was a perceived need and submit, five weeks after the start date, a detailed

business plan, including a formal presentation of their case. Two constraints included the semester length and limit of venture capital. This limit was set at \$5,000, unless the business plan justified a greater amount.

The test of the model involved a questionnaire administered in a classroom setting one week after the business report was submitted. All items comprising the scales measuring the original nine variables were included in the questionnaire.

Data analysis was performed to detect whether the EO scale and the retained independent variables scales were correlated using the Pearson Product-Moment Method. The following results were obtained: Perceived Personal Objectives (PO) had the strongest relationship to the Entrepreneurial Orientation (EO). Perceived Attitude to Risk (RA) and Choice Dilemma (CD) variables were significantly correlated to EO.

Correlation tables were computed to identify possible differing patterns between below- and above-average scorers on the EO Scales. Lower scorers showed a stronger correlation with the Tutorial Support (TU) variable, while higher scorers showed a stronger correlation with the PO, RA, and CD variables. Generally, the correlations were stronger for the higher-scorer group (Cachon & Cotton, 1987).

The researchers cautioned against general conclusions from this study since most of the scales used were new instruments whose validities were not yet established. The study identified the Perceived Attitude To Risk variable as being

related to an EO, while subjects being less entrepreneur-oriented tended to show stronger relationships with Tutorial Support. Furthermore, the results supported a previous finding by Brockhaus (1980) that risk-taking propensity as measured with the Kogan-Wallach Choice Dilemma instrument is not significantly different among entrepreneurs and the general population. However, these results are not consistent with other reports in the literature. The PO was a stronger predictor than Locus of Control which has been suggested as being an important characteristic in the literature. This finding does, however, support studies linking Need for Achievement with EO. The researchers concluded that the EO variable measurement scale might be a useful tool under certain conditions to evaluate the entrepreneurial orientation of subjects, but cautioned that further research is needed.

#### Integration of Self-Directed Learning, Personality Type and Self-Employment

Canada's leading economists suggest that this nation is undergoing significant changes contributing to political and social tension in Canada. These changes include the increasing trend away from a large manufacturing base to a new economy of smaller business structures. As these changes occur the number of self-employed individuals in Canada is rapidly growing. Candy (1991) suggested that self-directing citizens are needed to deal with the increasing rate of political, social and technological change. Traditional methods of education that encourage a dependency on formal, institutional settings are no longer effective for

a rapidly transforming society.

Candy (1991) described the self-directed learner first as an autonomous learner. Table 1 demonstrates how his description clearly parallels the definition of the entrepreneur utilized by the Ministry of Education in Ontario as well as characteristics commonly attributed to entrepreneurs.

Throughout the literature, clear similarities appear in definitions of self-direction and entrepreneurship. Tough (1979) suggested that individuals are likely to choose self-planning if they are self-reliant, independent and autonomous. Certainly, an exercise in business plan development would require the same attributes. Furthermore, self-employment must be a voluntary process involving self-reflection, constant adaptation and growth in order for the business initiative to succeed. Cranton (1992) described these very processes involved in self-directed learning.

Further indication of a relationship between self-directedness and success in self-employment is based on the study reported by Cachon and Cotton (1987). These researchers found that less entrepreneurial subjects tended to show a stronger relationship with Tutorial Support. In contrast, the more entrepreneurial subjects were in less need of Tutorial Support. This finding may suggest that individuals who are more entrepreneurial may also be more self-directed than less entrepreneurial individuals. Cotton's finding that more entrepreneurial subjects were able to complete business development projects with minimal tutorial support

Table 1

Comparison of Autonomy and Entrepreneur

<u>Autonomy</u>	<u>Entrepreneur</u>
conceives goals and plans	goal-oriented
exercises freedom of choice	self-motivated
rational reflection	realistic/rational risktaker
willpower to follow through	persevering
exercises self-restraint and self-discipline	self-disciplined
views himself/herself as autonomous	flexible, interdependent



could be indicative of their self-directedness.

The similarities between self-directed learning and self-employment are remarkable. They suggest that a positive relationship is likely to exist between self-directed learning and success in self-employment. Chapter three describes the procedures used to determine whether such a relationship can be empirically demonstrated.

Herbeson (1990) conducted a study to determine whether correlations exist between self-directedness and psychological type. This study involved a sample of 133 graduate and undergraduate students in a Faculty of Education at Brock University. Each participant completed the Myers Briggs Type Indicator (MBTI) and Guglielmino's Self-Directed Learning Readiness Scale (SDLRS). Eighty-five percent of the sample scored average or above average on the SDLRS. The correlations drawn from her data suggest that an individual who is an extraverted intuitive type according to the MBTI would be more likely to prefer self-directed learning than an individual who is an introverted sensing type (Herbeson, 1990, pp. 8-12).

Herbeson found that psychological type accounted for 28% of the variance in the prediction for self-directed learning. The results of her study also suggested that intuition alone accounted for 15% of the variance in self-directed learning readiness. A correlation matrix for the total sample in Herbeson's study indicated modest correlations between SDLRS scores and MBTI scores as follows:

extraversion ( $r = .331$ ); introversion ( $r = -.367$ ); sensing ( $r = -.398$ ); and intuition ( $r = .385$ ). According to Herbeson (1992), the most important outcome of the study was that learners vary in their ability to be self-directed learners.

A theoretical relationship between the extraverted intuitive type and entrepreneurship is pointed out as well by Jung (1962). He suggested that the extraverted intuitive type has exceptional potential as “the initiator of every kind of promising enterprise”(p. 611). Sharp (1987) specifically referred to extraverted intuitives as people who are innovative entrepreneurs. Knoop (1994) included entrepreneur as one of the frequently chosen occupations of the EN type. A definite link is established in the literature between entrepreneurship and the extraverted intuitive type of personality.

What has emerged from the literature review is a strong indication that linkages exist between the following variables: self-directedness and entrepreneurship; self-directedness and psychological type; as well as entrepreneurship and psychological type, particularly extraverted intuitive. The subsequent chapter will present the methodology used to provide empirical research supporting these relationships.

## CHAPTER THREE: METHODOLOGY

### Research Design

The research was aimed at determining whether a relationship exists between self-directed learning and success in self-employment. As well, the research was aimed at determining whether a relationship exists between psychological type and success in self-employment. The design was a mixed one beginning with quantitative and descriptive, followed by qualitative and interpretive research.

### Sample

The sample selected for this study consisted of participants of self-employment or entrepreneurship programs sponsored by the federal and provincial governments. All participants took part in this study on a volunteer basis. The sample was comprised of 79 females and 106 males. Participants ranged in age from 22 to 68 years, with the mean age being 39. Their educational backgrounds were diverse with 27 not completing high school, 31 completing high school, 81 completing at least one year of college or university. Of the sample, 46 did not report educational background.

All of the programs utilized in this study were intended to be job creation programs for individuals who were unemployed and interested in self-employment or small business creation. Participants were selected from five programs taking place in Ontario with similar goals and curriculum. The programs included the

following: (1) the Community Enterprise Program in Toronto, St. Catharines, Fort Erie, and Welland, Ontario; (2) the Business Opportunities for Women Program in St. Catharines, Ontario; (3) the Women in Self-Employment Program in St. Catharines, Ontario; (4) the Entrepreneurship Training Program in Brantford, Ontario; and (5) the Environmental Enterprise Program in St. Catharines, Ontario.

#### Community Enterprise Program

The majority of the sample was drawn from the Community Enterprise Program. This program was sponsored by the provincial government for social assistance recipients and individuals who were long-term unemployed and ineligible for unemployment insurance. The program duration was 42 weeks at the start of the study, but was later extended to 52 weeks, then 60 weeks with an optional 12-week extension depending on the clients' needs and performance. Individual business development plans were arranged for clients. Participants entered an initial training phase ranging in duration from four to twelve weeks. All program delivery agents provided workshops for self-assessment, marketing, business plan development, business operations, and financial management. Throughout the program, clients were provided with technical support from business consultants, mentors, and other professional resource people. In all cases, clients were responsible for their business financing: No grants were given to the clients for start-up capital. Clients were allowed to continue to receive income support such as social assistance for the duration of the program while they

launched their businesses, provided that no personal drawings were taken from the business. All business income was expected to be invested in the business.

#### Business Opportunities for Women Program

Of the sample, 15 participants were drawn from the Business Opportunities For Women Program, a 20-week program designed for women entrepreneurs who were eligible to receive unemployment insurance. This federally sponsored program provided participants from across the Niagara Region with twenty weeks of self-employment training, including self-assessment, marketing, business plan development, business operations, and financial management as key elements. Clients were also provided with mentor support, business consultations, and access to additional resource people. Upon completion of the program, clients could start their businesses. No capital assistance was provided for business start-up.

#### Women in Self-Employment Program

The Women in Self-Employment Program was a sixteen-week, federally sponsored program for women entrepreneurs. Six participants were used as part of the sample. The program design was very similar to the Business Opportunities for Women program, but it was shorter in duration. Program participants were from across the Niagara Region.

#### Entrepreneurship Training Program

Ten participants in the sample were drawn from the Entrepreneurship Training Program in Brantford, Ontario. This program was a 20-week training

program sponsored by the federal government. Participants were all unemployment insurance recipients. Training was similar to that provided for the Community Enterprise Program. Participants could start their businesses upon completion of the program. No start-up capital was provided.

#### Environmental Enterprise Program

The Environmental Enterprise Program was an eighteen-week, federally sponsored program for individuals who were eligible to receive unemployment insurance. This program was designed for individuals with a background or solid interest in developing environmentally-related businesses. Key program elements included business development training, international marketing, and environmental legislation. Business consulting was provided by environmental consultants, marketing specialists, lawyers, and accountants. Upon completion, participants could start their businesses. No start-up capital was provided. Participants came from across the Niagara Region and Hamilton, Ontario. Two participants from this program took part in the study.

#### Selection Criteria for Self-Employment/Entrepreneurship Programs

All of the programs involved an initial orientation session during which the program objectives were outlined, as well as the procedure for application, and the criteria for selection. Following the orientation, applicants who were eligible for the government-sponsored programs participated in personal interviews during which they presented their business ideas and discussed their reasons for wanting

to start their own business venture. Selection was based on following criteria: (1) the viability of business idea for the applicant; (2) the suitability of the applicant in terms of personal motivation, drive and determination; (3) the applicant's previous experience and education; (4) the financing requirements for the business and the applicant's access to start-up capital for the proposed venture; and 5) the applicant's eligibility for the program based on the funding agent's requirements, (for example, some programs accepted only individuals who were eligible to receive unemployment insurance). Acceptance into the programs was decided by the various delivery agents. In some cases, participants also completed a self-assessment process in order to evaluate their suitability for self-employment.

### Instrumentation

#### Self-Directed Learning Readiness

Self-directed learning readiness was measured by Guglielmino's Self-Directed Learning Readiness Scale (SDLRS). The SDLRS was created by Lucy Guglielmino in 1977 as part of her doctoral dissertation. Using a modified version of the Delphi technique, Guglielmino developed the instrument with the support of fourteen experts in the field of adult education. These experts, including Houle, Knowles, and Tough, were asked to identify and rate attitudes, abilities, values and personality characteristics that they considered important for self-directed learning. As a result of this process, thirty-three characteristics were identified and used to develop the SDLRS. The scale is comprised of 58 items

arranged in a Likert-type questionnaire.

Guglielmino (1977) (as cited in Guglielmino, 1989) indicated the reliability of the SDLRS to be .87 (Cronbach Alpha). According to Guglielmino (1989), a data analysis of 3,151 subjects yielded a split-half reliability estimate of .94.

Guglielmino (1989) presented support for criterion validity and construct validity. Guglielmino (1989) reported that at least 17 studies have been conducted to examine the validity of the SDLRS. She also reported that “a recent meta-analysis of 29 studies using the scale provides further evidence of its validity, revealing positive associations with self-directed learning activity (.27), autonomy (.22), and growth orientation (.22), and a negative relationship with dependence (-.12)” (p. 238). Little information is reported on predictive validity (Guglielmino, 1989).

As indicated in the literature review, the SDLRS has received several criticisms. However, given that no superior measures exist in the literature, the SDLRS was used for this study.

### Personality Type

Initially, the Myers-Briggs Type Indicator (MBTI) was considered for the study to identify personality types. The MBTI was developed in 1962 by Isabel Briggs-Myers and Katherine Briggs to measure personality according to Jungian theory of psychological type. Since its original version, the MBTI has undergone several revisions. It has been used in numerous studies to measure personality



type. The most recent version contains 126 forced-choice items in a self-scorable format. The MBTI discerns 16 different personality types.

Two groups of subjects with a total of 35 participants took part in a pilot study to determine whether the MBTI would be an effective tool for this sample group. A decision was made to seek an alternative instrument for measuring personality type for the following reasons:

- i) The time required to administer the MBTI, score it and then discuss it was approximately four hours for each of the two groups. Scoring was not done by the participants. A qualified administrator completed the scoring and presented the results in a second meeting. The administrator interpreted the types for the group and agreed to meet individually with any of the participants who wanted further discussion. This procedure required an excessive amount of time to complete all components of the study in a feasible time frame for the desired sample size.
- ii) The MBTI classified participants into one of sixteen types. Several participants experienced difficulty understanding how they could be classified into one of sixteen types. Some felt, for example, that they possessed characteristics of several different types. Generally, the participants did not find the experience valuable. Possibly because of their type, they felt that too much time was being spent in self-assessment exercises, when they wanted to “get down to business.”

- iii) The cost of administration was prohibitive for the desired sample size. In addition to the cost of the instrument, the procedure required a qualified administrator to be hired to conduct the assessment.

The second instrument selected was the PET Type Check . Cranton and Knoop (1995) developed the PET Type Check based on Jung's (1971) Psychological Types. The PET consists of 80 items, each rated on a five-point, Likert-type scale. There are ten items for each of the eight personality types. The PET Type Check has been used with over 2,000 individuals with results that indicate acceptable reliability and validity (Cranton & Knoop, 1995).

The PET Type Check was developed over a five-year period. The initial instrument included 320 phrases and sentences with 40 statements for each of the eight types. These items were taken directly from Jung's (1971) Psychological Types. In cases where it was necessary to rephrase items for easier understanding, every effort was made to retain original wording. The resulting pilot instrument containing 384 items was administered to over 500 individuals, mostly in the field of education.

Following this procedure, 24 graduate students who were familiar with Jung's type theory participated in an exercise addressing the face validity and content validity. For each of the eight types, three students had a clearly dominant function. After the students were given readings from Psychological Types pertaining to their dominant function, they were asked to identify items on the pilot

instrument pertaining to their dominant function. The best 120 items were retained for the test version.

The test version was administered to 286 individuals. Items with low inter-item correlations within their scales and items with low point bi-serial correlations with the total scale score were eliminated. The second test version contained 80 items with ten items for each of the eight scales. This version was administered to nearly 1,000 individuals. A principal-components factor-analysis was performed. Further modifications were necessary until a final version with 80 items resulted with acceptable validity and reliability. Cronbach's alpha reliability coefficients were obtained for each scale.

The PET Type Check involves three components. The first is the empirical portion which involves the completion of the 80 items on the Likert-type questionnaire. The second component involves the interpretation of individual profiles. Upon completion of the questionnaire, the results are tallied for each of the eight types and transferred to an individual profile. The profiles are then interpreted and discussed with the participant. The third component involves a critical re-interpretation. The interpretations of the individual profile are critically questioned and discussed in relation to the participant's personal and professional life. In this study, this involved discussions regarding individual profiles in relation to the business ventures selected by the participants.

The PET Type Check was more easily administered, interpreted and

understood by participants of this study than the MBTI. The participants enjoyed the immediate feedback. They liked the way that the PET Type Check yields a unique profile for each participant showing the development of all eight types rather than simply the one dominant type. After a two-day workshop for facilitators, the researcher was able to administer the PET, which made the instrument much more affordable than the MBTI and created a more direct, hands-on research procedure. The participants tended to relate better to the procedure because they were directly involved in creating their own profiles, rather than an administrator telling them their results. Generally, the participants rated the experience as “worthwhile” and “enjoyable.” The PET Type Check was selected as the instrument for assessing personality type for this study.

### Self-Employment

In order to measure success in self-employment for each participant in the sample, the following data were collected: 1) whether or not the business started; 2) whether or not the business survived six months; and 3) whether or not the business survived one year. This information was available from the individual clients associated with the Niagara College Innovation Centre. Information from clients at alternate program sites was collected from the program co-ordinators with the permission of their clients.

Table 2

PET Type Check: Means, Standard Deviations and Intercorrelations (N=621)\*

	<u>M</u>	<u>SD</u>	<u>Alpha</u>	<u>ET</u>	<u>EF</u>	<u>ES</u>	<u>EN</u>	<u>IT</u>	<u>IF</u>	<u>IS</u>
<u>Extraverted</u>										
Thinking (ET)	45.7	16.8	.71							
Feeling (EF)	43.9	15.8	.72	.37**						
Sensing (ES)	51.9	17.8	.73	.50**	.67**					
Intuition (EN)	47.2	17.5	.77	.44**	.34**	.27**				
<u>Introverted</u>										
Thinking (IT)	31.5	16.5	.71	-.08	-.49**	-.41**	-.08			
Feeling (IF)	27.6	16.9	.76	.05	.30**	-.17**	-.17**	.55**		
Sensing (IS)	24.8	13.5	.63	-.01	-.18**	-.18**	-.02	.54**	.48**	
Intuition (IN)	17.8	13.9	.63	-.04	-.30**	-.25**	.07	.58**	.48**	.55**

\*(Cranton & Knoop, 1995, p. 14.)

## Procedures

The PET Type Check and the SDLRS were administered in a classroom environment during the training phase of the self-employment/entrepreneurship programs. All class participants were invited to complete the instruments as part of an experiential exercise in self-assessment. The instruments were administered to fifteen different groups within the five participating programs. During the early part of the Community Enterprise Program, however, only the PET Type Check was administered. It was determined that the Self-Directed Learning Readiness Scale would also be administered for the purpose of this research after three classes had completed the PET. Several clients from earlier programs were asked on an individual basis, when they attended business consultations, if they wished to complete the SDLRS.

Participants were advised that participation in the study was voluntary and all information collected for the study would remain confidential. The participants were also assured that the instruments were nonjudgemental. The purpose of the study was described to participants. They were advised that the intent of the research was to determine whether a relationship exists between entrepreneurial success and personality type. Participants beyond the first three groups were also advised that the intent of the research was to determine whether a relationship exists between entrepreneurial success and self-directedness. The term self-directedness was explained. Participants were advised that if they chose to

participate in the study, their tests would be collected and coded for research purposes.

Each participant completed his or her profile and SDLRS, then results were discussed among class participants. Following the discussion, the instruments were collected from individuals who agreed to be part of the study. Some participants chose to keep their results to themselves.

On occasion, one of the instruments was not completed due to time constraints. Participants were advised that they could complete the instruments on their own time and hand them in at any time during the program. They were also invited to discuss their results with the researcher in an individual consultation if desired. In total, of the 185 subjects who participated in the study, 148 participants completed the PET Type Check, and 136 participants completed the SDLRS.

In some cases profiles were not well differentiated. Those that were difficult to interpret were reviewed with Professor Cranton to ensure that they were properly assessed. A total of seven were considered undifferentiated.

The next part of the research study involved monitoring participants' self-employment development activities to determine if they actually started a business, whether or not they remained in business for a period of six months, and whether or not they remained in business for one year. This information was available through tracking reports maintained for the programs for a minimum of one year from the participants' date of entry into their program.

Success in self-employment is an individual, subjective measure and cannot be interpreted by quantitative measures alone. For example, increased self-esteem and autonomy are important indicators of success for this study group. A small sample of 10 subjects was asked to participate in personal interviews to discuss how the self-employment experience affected them. Two brief questionnaires were completed during the interview (See Appendix C and Appendix D). The interviews were completed after the individuals had been in business for one year. Some were completed in an office environment and some were completed by telephone because the participants could not leave their businesses.

### Data Analysis

The data analysis included frequency distributions, means, standard deviations and Pearson correlations as descriptive statistics. Multiple correlations were used to describe the relationship between self-directed learning readiness, personality type, age, and education. Data were entered and analysed using SPSS/PC+.

Frequency distribution tables were developed to assess the relationship between SDLRS scores and business start, six-month business survivals, and one-year business survivals. Frequency distribution tables were also developed to assess the relationship between type and the three measures of self-employment success. As well, the frequency of business starts within each type was calculated to determine whether or not there would be a higher percentage of business starts



within a particular type based on the number of subjects from the sample within that type. This was done to further assess whether a particular type may be most likely to start a business.

Following, SDLRS scores and type were compared together with the three measures of business success. Both SDLRS scores and type were considered separately with age and education level.

In addition, t-tests were performed to determine whether or not there were significant differences between those individuals who started a business and those who did not. The T-tests were performed for the SDLRS and each of the eight types to determine the probability that the corresponding population mean scores were different for business starters and nonstarters.

Qualitative data were also collected from a selected sample of ten participants who remained in business for at least one year. The purpose of the interviews was to discuss their self-directed activities and their business success. Two brief questionnaires were used to guide the interviews (Appendix C and Appendix D). Some of the interviews were conducted in an office environment, and some over the telephone in instances where subjects could not leave their business to participate in an interview. Responses to the two questionnaires were summarized in Appendix E and Appendix F.

#### Limitations

1. A correlational design does not indicate a cause and effect relationship.

2. Frequency distributions do not indicate a cause and effect relationship.
3. The reliability and validity of this research is limited to the reliability and validity of the instruments utilized in the study.
4. Many factors contribute to an individual's success in business. Financial constraints must be considered in assessing the success of any self-employment initiative.
5. Given the time frame, a more complete assessment of success could be achieved in January, 1997, once all participants in the sample had an opportunity to be in business for one full year.
6. It is possible that the participants, knowing that they were involved in a study to assess the relationships between self-directed learning readiness and psychological type, may have distorted their responses.
7. Caution must be taken in attempting to generalize these findings beyond the sample used in this study. This area of research requires further study, for this particular sample, as well as other self-employed individuals and other types of entrepreneurs.

This chapter presented the methodology used for conducting this study.

The next chapter will present the results of these procedures.

## CHAPTER FOUR: RESULTS

### Introduction

This chapter presents the results of the study. Means, standard deviations, Pearson correlations and frequency distributions are provided in the section on quantitative research. These findings are then analysed in relation to the research questions. Also included in this chapter are the results of the qualitative research involving personal interviews with a selected sample of ten participants who remained in business for at least one year.

### Quantitative Research

Table 3 presents selected demographic characteristics of the research participants. There were 106 males and 79 females in the sample. The largest age group was between 36 and 45 years, with one third of the total sample in this range. Almost one third of the sample was 35 years or less. The youngest participant was 22 years of age. Nearly half of the participants had completed a minimum of one year of post-secondary education. Their educational backgrounds included college diplomas, university degrees, trades, technical qualifications and various courses. An additional 16.8 percent completed high school. Of the total sample, 14.6 percent did not complete high school and 24.9 percent did not report their education.

An examination was conducted of the associations between variables using Pearson product-moment correlation coefficients. This matrix was calculated

Table 3

Frequency and Percent of Selected Demographic Characteristics of ResearchParticipants (n = 185)

<u>Characteristics</u>		<u>N</u>	<u>%</u>
Sex	Male	106	57.3
	Female	79	42.7
Age	0-35 years	58	31.4
	36-45 years	62	33.5
	46-54 years	20	10.8
	55+ years	11	5.9
	Did not report age	34	18.4
Education	Did not complete high school	27	14.6
	Completed high school	31	16.8
	Minimum 1 year post-secondary	81	43.8
	Did not report education	46	24.9

using the 96 participants who had completed both the SDLRS and the PET Type Check. Intercorrelations between scores on the eight type functions were consistent with those reported in the literature. As presented in Table 4, the correlation matrix for this sample shows a positive correlation between SDLRS scores and extraverted intuitive type scores ( $r = .36$ ). A near significant correlation was found for SDLRS scores and education ( $r = .25$ ). Both of these findings are consistent with the literature. The finding that SDLRS correlates with education is also a criticism of the scale. As indicated in the literature review, individuals with higher levels of education tend to receive higher scores on the scale.

A significant negative correlation was found between SDLRS scores and introverted feeling scores ( $r = .29$ ). This is a new finding that has not appeared previously in the literature. It is, however, consistent with both theories. Introverted feeling types tend to shrink back from the world outside. Typically they keep within themselves. The self-directed learner, on the other hand, often reaches out into an autodidactic world of experience and resources.

Table 5 presents the frequency distribution, mean and standard deviation for the SDLRS scores. Of the total sample, 136 participants completed this instrument. Low scores were defined by Guglielmino as less than 176. Below average scores were defined as those between 177 and 201; average scores were between 202 and 226; above average scores were between 227 and 251; and

Table 4

Intercorrelation Matrix for Psychological Types, SDLRS Scores, Age and Education (n=96)

	ET	IT	EF	IF	ES	IS	EN	IN	SDLRS	AGE	EDU
ET	1.0000										
IT	.4249**	1.000									
EF	.1393	.1168	1.0000								
IF	-.2601*	.4483**	.0033	1.0000							
ES	.3971	.1210	.3117**	.1584	1.0000						
IS	.1973	.4207**	.1545	.4793**	.0749	1.0000					
EN	.1952	.1676	.2397*	-.1603	.1383	.2229*	1.0000				
IN	.1287	.4073**	-.1136	.4199**	-.0894	.5151**	.1313	1.0000			
SDLRS	.0192	-.1436	-.0575	-.2878*	-.0961	-.0300	.3577**	-.0590	1.0000		
AGE	.0267	-.0533	.0542	-.1353	.0475	-.0688	.0707	-.1856	.1325	1.0000	
EDU	-.1961	-.0703	-.1210	-.1263	-.1241	-.1092	-.1019	-.1729	.2501	.0586	1.0000

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\*\*significant at .001    \* significant at .01

Table 5

SDLRS Scores: Frequency Distribution, Percent, Mean and Standard Deviation

SDLRS Scores	Frequency (f)	%
Low	0	0
Below Average	9	6.6
Average	23	16.9
Above Average	54	39.7
High	50	36.8
Total Responses	n = 136	

Mean = 241

Standard Deviation = 21.9

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high scores were between 252 and 290. Nobody in the sample scored low on the SDLRS. The mean score of 241 was well above the average of 214 identified by Guglielmino. The standard deviation was 21.9 for the total sample who completed the instrument. Of the participants, 76.5 percent scored above average or high based on the norms developed in the standardization of the instrument.

Table 6 presents the frequency distribution for scores on each of the type functions. A total of 148 participants completed the PET Type Check. Of this sample, 47.3 percent were EN types. This finding is consistent with Knoop's (1994) descriptions of the types indicating that EN's frequently choose entrepreneurship as a career. This is also consistent with Jung's (1962) description of the EN type. For the rest of the sample, the next highest frequency was 12.2 percent for the ES type. Of the total participants who completed the PET Type Check, 78.4 percent were extraverted, while only 16.9 percent were introverted and 4.7 percent were undifferentiated. Not only were ENs the most likely type to choose self-employment, the mean for ENs was higher than any other type score indicating that their intuition function tended to be quite well developed.

The next part of this study examined SDLRS scores in relation to three measures of self-employment success, including business starts, businesses surviving six months, and businesses surviving one year. Table 8 shows the business starts in relation to SDLRS scores. Of the participants who completed the SDLRS, 68 started businesses while another 68 did not. Of the participants who



Table 6

Psychological Types: Frequency Distribution (n = 148)

<u>Dominant Type</u>	<u>Frequency (f)</u>	<u>%</u>
ET	15	10.1
EF	13	8.8
ES	18	12.2
EN	70	47.3
IT	11	7.4
IF	9	6.1
IN	2	1.4
UN	3	2.0
UN	7	4.7

Table 7

Psychological Type Functions: Means and Standard Deviations

Type	Mean	Standard Deviation
ET	40.9	15.0
EF	41.0	13.8
ES	43.7	13.8
EN	55.5	18.0
IT	43.4	15.0
IF	31.5	16.1
IS	31.7	12.6
IN	28.9	15.0

started, 31 scored high on the scale. This represents 45.6 percent, the largest group of business starts. The next largest group of 28 starters scored above average on the SDLRS, representing 41.2 percent. Together, 86.8 percent of the business starters scored above average or high on the SDLRS. Only 11.8 percent had average scores and 1.5 percent had below average scores. No participants scored low on the SDLRS. In comparison, 11.8 percent of the nonstarters scored below average on the SDLRS and 22.1 percent had average scores; 38.2 scored above average on the scale and 27.9 percent scored high. Over 20 percent more participants with top end scores started business, while over 20 percent more in the low end scores did not start. A Chi-square test showed that this difference was significant ( $p < .01$ ).

Table 9 shows that of the participants who completed the SDLRS, 54 remained in business for six months. Of these participants, 44.4 percent scored high on the scale and 40.7 percent scored above average. Together, 85.1 percent of the business operators had scores above average or high. At this point in the study, only 43 percent of the sample who completed the SDLRS had been in the program long enough to be in business for six months. Of the 42 participants who completed the SDLRS and remained in business for at least one year, 47.6 percent scored high on the scale, and 35.7 percent scored above average. Only 14.3

Table 8

SDLRS Scores by Business Starts/Nonstarts

SDLRS Scores	Number of Business Starts	Percent of Starts	Number of Nonstarters	Percent of Nonstarters
Low	0	0	0	0
Below Average	1	1.5	8	11.8
Average	8	11.8	15	22.1
Above Average	28	41.2	26	38.2
High	31	45.6	19	27.9
Totals	68	100.1	68	100.0

Table 9

SDLRS Scores by Businesses Lasting Six Months

SDLRS Score	Number of Businesses Lasting Six Months	% of Business Lasting Six Months
Below Average	1	1.9
Average	7	13.0
Above Average	22	40.7
High	24	44.4
TOTALS	54	100.0

Table 10

SDLRS Scores By Businesses Lasting One Year

<u>SDLRS Score</u>	<u>Number of Businesses Lasting One Year</u>	<u>% of Businesses Lasting One Year</u>
Below Average	1	2.4
Average	6	14.3
Above Average	15	35.7
High	20	47.6
TOTALS	42	100.0

percent of the one-year survivors scored average on the SDLRS, while 2.4 percent scored below average. There was a clear indication that individuals who were highly self-directed were more likely to succeed in business for one year.

In the next part of this study, psychological type was examined in relation to each of the three measures of success. Of the total sample, 148 participants completed the PET Type Check. Table 11 shows the business starts in relation to psychological type. Of the 74 individuals who started businesses and completed the PET, 41 were EN types. This represents 55.4 percent of the business starts and 27.7 percent of the sample who completed the PET Type Check. Of <sup>all the</sup> ~~these~~ business starters, 78.4 percent were extraverted, while only 16.2 percent were introverted and 5.4 percent were undifferentiated.

Given the large number of individuals who were EN types in the overall sample, an analysis was done of business starts within each type. Table 12 indicates that when each type is examined independently, the EN type has a greater frequency of business starts in relation to any other type. Of the 70 EN types, 58.6 percent started a business. While other types also had relatively high rates of success (for example, 54.5 percent for IT types), the number of individuals within each type is too small to provide meaningful data.

Table 11

Business Starts Distribution by Type

Type	Number of Business Starts	Percent of Business Starts	Business Starts as a Percent of Type Sample
ET	4	5.4	2.7
EF	6	8.1	4.1
ES	7	9.5	4.7
EN	41	55.4	27.7
IT	6	8.1	4.1
IF	4	5.4	2.7
IS	1	1.4	.7
IN	1	1.4	.7
UN	4	5.7	2.7
TOTALS	74	100.4	50.1

Table 12

Business Starts within Each Type

<u>Type</u>	<u>Number in Sample</u>	<u>Number of Business Starts</u>	<u>% Starts Within Type</u>
ET	15	4	26.7
EF	13	6	46.2
ES	18	7	38.8
EN	70	41	58.6
IT	11	6	54.5
IF	9	4	44.4
IS	2	1	50.0
IN	3	1	33.3
UN	7	4	57.1
TOTALS	148	74	



Table 13

Businesses Lasting Six Months Distribution by Type


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Type	Number of Businesses Lasting Six Months	Percent of Businesses Lasting Six Months	Businesses Lasting 6 mo. % of Sample
ET	2	3.5	1.4
EF	3	5.3	2.0
ES	5	8.8	3.4
EN	35	61.4	23.6
IT	5	8.8	3.4
IF	3	5.3	2.0
IS	1	1.8	.7
IN	1	1.8	.7
UN	2	3.5	1.4
TOTALS	57	100.2	38.6

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Table 14

Businesses Lasting One Year: Distribution by Type

Type	Businesses Lasting One Year	% of Businesses Lasting One Year	% of Businesses in Type Sample Lasting One Year
ET	1	2.0	.7
EF	2	4.1	1.4
ES	4	8.2	2.7
EN	31	63.3	20.9
IT	4	8.2	2.7
IF	3	6.1	2.0
IS	1	2.0	.7
IN	1	2.0	.7
UN	2	4.1	1.4
TOTALS	49	100.0	33.2

The extraverted intuitive types also experienced the highest frequency of survival for six months, as indicated in Table 13. Of the businesses started by ENs, 61.4 percent lasted at least six months. This represented 23 percent of the overall sample who completed the PET Type Check. No other type had frequencies close to this percent. The next closest groups, the ES and IF types, both represented 8.8 percent of the businesses lasting six months.

Likewise, for businesses surviving one year, Table 14 indicates that the EN type outperformed all other types, representing 63.3 percent of the successful businesses. No other types experienced frequencies close to the EN type. The next best performers, the ES and IT types both represented 8.2 percent of businesses surviving at least one year.

Not only did the EN type represent the largest number of business starts, but as the degree of success in terms of length of survival increased, the percent of EN types increased. For this overall sample, ENs represented 20.9 percent of all businesses lasting one year. For this sample, 33.2 percent of businesses lasted one year. The ENs clearly experienced the highest frequency of success.

Table 15 provides a matrix of 51 participants in the sample who completed both the SDLRS and the PET Type Check and started a business. Of all business starters, 82.4 percent scored above average or high on the SDLRS. Of the 51 starters, 28 were extraverted intuitive types. This represents 54.9 percent of all starters. Of the EN types, 15 scored high on the SDLRS. These highly self-

directed, extraverted intuitive types represented the most successful group of business starters (29.4 percent of all business starters). An additional 11 EN business starters scored above average on the SDLRS. Together, 93 percent of the EN starters scored above average or high on the SDLRS. Of all the business starters, over half (51 percent) were EN types with above average or high SDLRS scores.

Table 16 provides a matrix of results for participants who completed the SDLRS and PET Type Check, but did not start a business. The extraverted intuitive type represented only 37.5 percent of nonstarters compared to 51 percent of starters. Table 16 indicates that even though ENs were most prevalent in the overall sample compared to all other types, a considerably larger percent were starters than nonstarters. Of the nonstarters, 68.8 percent scored above average or high on the SDLRS, compared to 93 percent of the starters. The participants who started businesses were most frequently EN types and highly self-directed. Unfortunately, these results were not significantly different using a Chi-Square analysis as the majority of the cell frequencies were evenly distributed.

Of the businesses succeeding for at least six months, 80 percent scored above average or high on the SDLRS. Table 17 indicates that 62.5 percent of the 40 businesses lasting six months were operated by ENs. Of these, 92 percent scored above average or high on the SDLRS. There were insufficient numbers of nonstarters to complete further comparisons.

Table 15

Psychological Type by SDLRS Score for Business Starts

Type	SDLRS Scores				Totals
	Below Average	Average	Above Average	High	
ET		1			1
EF		1	4		5
ES		2	3		5
EN		2	11	15	28
IT		2	1	1	4
IF				2	2
IS			1		1
IN			1		1
UN	1		2	1	4
TOTALS	1	8	22	20	51

Table 16

Psychological Type by SDLRS Score for Nonstarters

Type	SDLRS Scores				Totals
	Below Average	Average	Above Average	High	
ET	1	2		3	6
EF	2	1	3		6
ES	1	3	3	1	8
EN		1	8	9	18
IT			4	1	5
IF	1	2			3
IN					
UN	1		1		2
TOTALS	6	9	19	14	48

Table 17

Psychological Type by SDLRS Score for Six-Month Successes

Type	SDLRS Scores				Totals
	Below Average	Average	Above Average	High	
ET		1			1
EF			3		3
ES		2	1		3
EN		2	10	13	25
IT		2	1		3
IF				1	1
IS				1	1
IN			1		1
UN	1		1		2
TOTALS	1	7	17	15	40

Of the businesses succeeding for at least one year, 80 percent scored above average or high on the SDLRS. Of the 35 businesses, 22 were extraverted intuitives, representing 62.9 percent. Of the ENs who succeeded for at least one year, 90.9 percent scored above average or high on the SDLRS. There were insufficient numbers of nonstarters to draw further comparisons at this point in time.

Next, associations between education and SDLRS as well as education and type were examined. As indicated in the initial correlational matrix, individuals with a higher level of education, that is, at least one year of post-secondary education, tended to score above average or high on the SDLRS. No relevant associations were noted between education and type.

The final data analysis involved performing t-tests to determine the presence of a significant difference between the means for business starters and nonstarters for the SDLRS and for each of the eight types. The difference between means for business starters and nonstarters on the SDLRS was highly significant (.002). The t-test for equality of means yielded a  $t$  of 3.2,  $p < .05$ .

When looking at the subjects' scores on the Pet Type Check regardless of dominant type, there were no significant differences between means for starters and nonstarters. This finding indicates that the use of dominant typologies is more meaningful than the use of type scores, regardless of dominant function.



Table 18

Psychological Type by SDLRS Score for One-Year Successes

Type	SDLRS Scores				Totals
	Below Average	Average	Above Average	High	
ET		1			1
EF			2		2
ES		2	1		3
EN		2	7	13	22
IT		1	1		2
IF				1	1
IS				1	1
IN			1		1
UN	1		1		2
TOTALS	1	6	13	15	35

### Conclusion of Quantitative Research

A consistent pattern of success was indicated throughout the study for extraverted intuitives who were highly self-directed. This group clearly had the greatest results for all three measures of success: they started the most businesses; they were most likely to succeed for at least six months; they were the largest group to succeed for one year. No other type experienced results anywhere near the ENs. The significance of SDLRS was further supported by the t-test. These findings suggested that self-directed readiness and type together could provide a useful model for predicting individuals' suitability for self-employment and likelihood of success.

### Qualitative Research

Ten interviews were conducted with individuals who had been operating their businesses for at least one year after entering a self-employment program. All were clients of the Niagara College Innovation Centre. The participants were assured that all information would remain confidential and that participation was voluntary. They were advised that the interview was a follow-up to the initial research conducted for this study. The interviews involved two questionnaires, one pertaining to self-directed learning, the other pertaining to business success. Participants were advised that their responses would be reported collectively in this study.

Of the selected sample, five were male and five were female. They ranged

in age from 26 to 54 years. Their businesses varied in nature with some operating as home-based enterprises and others located in commercial establishments.

Annual gross incomes ranged from approximately \$7,000 to \$160,000.

The first questionnaire included questions based on Cranton's (1992) definition of self-directed learning. All ten participants indicated that their decision to start a new business venture was voluntary. They described a wide range of activities which required them to take initiative to learn something new in order to conduct their business. These activities are listed in Appendix E. They include networking, market research, taking courses, and reading. Some of the activities involved independent activity, while others involved group interaction. Most activities were autodidactic in nature.

All of the participants felt that they were free to think or act as individuals and that they were in control of their activities. Some indicated, however, that it was a struggle to remain in control at all times and that family support or approval was important. Of the ten participants, nine expressed the importance of being in control of their own destiny while one indicated that no-one is in complete control at all times. One participant suggested that a higher power controlled one's destiny.

All of the participants felt that they had changed or grown as a result of starting their own business. Increased self-confidence, independence and personal growth were generally attributed to the experience. All of the changes cited were

of a positive nature.

Next, the ten participants were asked to answer a questionnaire relating to their success in self-employment. The purpose was to obtain more specific data relating to their personal feelings and the meaning of success to them individually. While some of the participants felt that they were very successful already, most expressed a desire or need for further growth and more financial stability. Nine of the ten participants felt differently about themselves as a result of the self-employment experience. Most felt more positive and self-confident.

For most of the participants, success meant monetary gain to some degree. Some felt that control, self-sufficiency and happiness were important for success. Participants attributed their success to diverse factors such as persistence, hard work, and faith and Christianity. They all felt that they had achieved some success.

Compared to working for someone else, all of the participants found self-employment to be a more rewarding experience. They also predominantly indicated that it was harder to be on their own. Control was an important factor in their preference. Freedom, flexibility, responsibility, and more meaningful outcomes were mentioned as factors contributing to their preference for self-employment.

Several participants identified items that they would do differently if they were just starting their business. More start-up capital, better marketing, and

hiring staff earlier were some of the changes mentioned. Several participants indicated that they would change nothing.

Throughout the interviews, all of the participants expressed positive responses to each of the elements pertaining to self-directed learning. Based on Cranton's (1992) definition, all of the ten participants had clearly experienced self-directed learning activities and had found them to be positive in nature. All of the participants experienced success to some degree; however, their perspective of success was quite varied. While monetary factors were generally important, so were personal gains, especially in terms of self-confidence, self-respect, and control over their own lives.

In this chapter, the results of the study have been presented. Chapter five provides a discussion of the results, including implications for practice and recommendations for further research.

## CHAPTER FIVE: DISCUSSION OF RESULTS

### Introduction

The purpose of this study was to determine whether or not a relationship exists between self-directed learning readiness and success in self-employment and between psychological type and success in self-employment. The study then examined whether these two factors together would provide a model for predicting success in self-employment. This final chapter will present a discussion of the results as well as implications for practice, theory, and future research.

### Discussion of Results

The individuals participating in this study were highly self-directed with a mean score of 241 on the SDLRS. A high proportion of participants scored above average or high on the SDLRS. It is clear that individuals who select self-employment as a career alternative tend to be highly self-directed. The standard deviation for the sample was within an acceptable range from the average standard deviation of 25.59 established by Guglielmino.

A positive correlation was found between SDLRS scores and the extraverted intuitive type. This finding is consistent with the theories and the results reported in the literature, for example see Herbeson, (1992). Self-directed learners typically participate in a variety of learning activities, some of which require personal interaction, while others require independent action. Extraverted intuitive types are generally suited to a dynamic learning environment.

Also consistent with the theories (Jung, 1971), a negative correlation was found between SDLRS scores and the introverted feeling type. This was a new empirical finding that was not reported in the literature. An introverted feeling type functions within an inner world, preferring harmony over the unpredictability of autodidaxy. This result suggests that self-employment consultants and trainers would have to spend more time guiding and supporting individuals who are introverted feeling types.

A near significant correlation between SDLRS and education which was found in this study is also consistent with findings reported in the literature (Brockett, 1985). Individuals with higher levels of education tend to receive higher scores on the SDLRS. Because of this result, caution must be taken in using this instrument with individuals with lower levels of education as Brookfield (1985) advised. Within the unemployed client groups utilized in this study, most had completed at least one year of high school. In different unemployed groups, there may be a higher percentage of people with lower levels of education.

Clearly, in terms of attitude, most of the individuals in the sample were extraverted. This finding is consistent with reports in the literature (Briggs, Myers, & McCauley, 1985) and is consistent with Jungian theory (Jung, 1971). Many self-employment activities such as personal selling, marketing, negotiating, and networking require strategies and decisions based on the "object." Depending on the nature of the business, introverts would require support for such functions.

Of the sample, 47.3 percent were EN types. This is consistent with Jungian theory as well as reports in the literature (Knoop, 1994). Intuitive people tend to be initiators, explorers, innovators, inventors. They are generally resourceful and creative. Individuals whose dominant type is extraverted intuition are more likely to consider self-employment as an exciting adventure.

### Implications for Practice

The SDLRS should not be used as a screening device for entry into self-employment programs. It would be more appropriate as a self-assessment tool. As a self-assessment tool, the SDLRS would provide useful information for individuals interested in self-employment. Self-employment activities often involve continuous learning. Entrepreneurs require flexibility to accommodate their long hours of work and erratic schedules. They generally lack the time to attend long-term, formal classes and instead, require concise, focussed learning opportunities available independently or during flexible time periods. Much of their learning is informal, obtained through trial and error. Even planned activities are specific to their unique business. Their learning needs must be addressed individually. Completing a personal assessment of self-directed readiness would enable individuals to consider their suitability for self-employment and to consider learning activities that would help to develop their self-directedness prior to their business start up.

The PET Type Check would serve as a useful instrument for self-



assessment of entrepreneurs. Understanding their own personality types, their strengths, weaknesses, preferences, and attributes would enable entrepreneurs to select a business that is appropriate for them, hire staff or service providers to accommodate their weaknesses, and develop strategic alliances that suit them personally as well as professionally. It would also enable consultants and educators to recognize areas that require additional time or other resources. The PET Type Check should not be used as a screening device. The results of this study do not support such an application. Any individual may be an exception to the rule.

There was clear indication that individuals who are highly self-directed are more likely to start a business and succeed in that business venture. There was a significant difference on SDLRS scores between the group who started a business and the group who did not. This result is important for self-assessment and for counselling purposes. It is very important for program design. The activities undertaken by entrepreneurs typically occur in an autodidactic environment. Enabling the entrepreneur to learn in such an environment makes much more sense than long-term classroom-based training. While bringing guest speakers with real experience into the classroom is beneficial, entrepreneurs prefer to have more control over their own learning than a traditional institutional environment allows. On the other hand, while an autodidactic learning environment might be suitable for some entrepreneurs, individuals moving through a transition of employment to

unemployment to self-employment generally require some counselling, mentoring, training, and technical resource support. What is important here is how these services are provided. Individual self-employment development plans should be available for the self-directed entrepreneur. Given that every business is as unique as the entrepreneur who creates it, participants in self-employment programs need flexibility and individualized training and support to develop their initiatives into successful ventures. The program must recognize the entrepreneurs' need for autonomy and self-management.

Business owners who were highly self-directed were more likely to succeed in their venture for six months and one year. The results of this study clearly support a relationship between self-directed learning readiness and success in self-employment. Business owners who develop the ability for self-directed continuous learning are more likely to survive long term.

A preference for extraverted intuition was also a clear indication of not only the ability to start a new business, but also to succeed for at least one year. As the length of success increased, the proportion of ENs increased. This result is important for entrepreneurs and their advisors. Businesses do not operate in isolation. They are part of a much larger society. For most entrepreneurs to be successful, they must continually seek new opportunities for learning and expanding their network of people. Many businesses today, even home-based businesses, operate on a global scale. As the pace of change continues to

accelerate, self-employment has become a growing sector of the new economy.

But it is not for everyone.

The results of this study support the use of both the SDLRS and the PET Type Check together as a means of predicting success in self-employment. When subjects' results were examined together, there were more business starters in the sample who were EN types and scored above average or high on the SDLRS, while there were fewer nonstarters with these characteristics. Most of the EN types were highly self-directed. Similar results occurred after six months and one year. The ENs represented the largest group to survive in business for six months. They were also highly self-directed. Of the businesses succeeding for at least one year, the majority were EN types who were highly self-directed. There appears to be a clear relationship between success and SDLRS scores and type. Individuals who are EN types and score high or above average on the SDLRS are most likely to succeed in self-employment. They are most likely to start and retain their businesses beyond the first year of operation.

### Implications for Theory

Based on the results of this study, self-employment success is influenced by the entrepreneur's self-directedness. Self-directedness should be included among the characteristics of entrepreneurs. This recommendation is supported not only by the quantitative analysis of this study, but also by the congruency between definitions of entrepreneurship and self-directed learning, particularly Candy's

(1991) definition. All four concepts which comprise Candy's definition of self-directed learning, that is, autonomy, learner-control, self-management, and autodidaxy, describe the characteristics and learning preferences of most entrepreneurs as presented in the literature review. Further, Cranton's definition of self-directed learner was broken down to form the basis of a questionnaire for the qualitative analysis. The responses of all ten participants indicated that their self-employment activities were voluntary. They each provided examples of learning activities which they initiated on their own, such as research, networking, and taking courses. Control was important to the participants. Several indicated that they felt more successful and preferred self-employment because they had greater control, responsibility or self-sufficiency. Throughout their self-employment initiatives, the participants all felt that they had changed and grown personally. While becoming self-employed, they were also being self-directed. This finding is consistent with studies reported by Hornsby et al. (1993) which include locus of control as an entrepreneurial characteristic.

Extraversion is another characteristic that describes an entrepreneur. The empirical results of this study support the likelihood of this attitude amongst successful entrepreneurs. The function, intuition, appears to be the dominant function of many successful entrepreneurs. Intuition should be included in the list of characteristics of entrepreneurs. These findings are consistent with Jungian theory (Jung, 1971). They are also consistent with the literature (for example, the

Wonderlic Entrepreneurial Quotient identified extraversion as a characteristic that would help entrepreneurs to achieve cooperation and support for other people). This entrepreneurial assessment tool also suggested that entrepreneurs follow their instincts in creating ideas and concepts. In this way, intuition is beneficial for entrepreneurs.

This study supports a model for predicting self-employment success using both the PET Type Check and the SDLRS together. However, in any self-employment initiative, many factors are at play. Access to capital, family constraints, and market conditions are among the various influences. These external constraints can have tremendous impact on an entrepreneur, and must be considered in an entrepreneur's self-assessment or a counsellor's assessment. Also, this study has not considered the two variables in relation to particular types of business. Depending on the nature of the business, various personality types may be more suited.

#### Recommendations for Future Research

This study is very preliminary. It requires further analysis after all participants in the study have had the opportunity to operate their businesses for a period of one year. That time period will be reached in October, 1996.

The study should be repeated for entrepreneurs who are not disadvantaged. The participants in this study were all unemployed upon entry into their self-employment programs. Factors such as lack of access to capital are more likely to

have an impact on their success. The study should be conducted with various self-employed samples in order to determine if results can be generalized to a wider population.

The SDLRS is better suited for individuals with high levels of education. At this point, it is the best available measure of self-directed learning readiness. Since entrepreneurs typically do not require formal educational qualifications to start a business, the study should be repeated if a more appropriate instrument is developed.

The results of the SDLRS scores indicated that individuals selecting self-employment as a career alternative were quite high in their readiness for self-directed learning. There is a need to determine how individuals can increase their readiness for self-directed learning through educational interventions.

Additional research is required to determine whether specific personality types are more suited for particular types of businesses. While this study suggests that an EN type is most likely to succeed in self-employment, further examination is needed of samples of entrepreneurs within business sectors. This information is important for self-assessment by individuals considering self-employment.

There is a need to understand how attitudes and functions that comprise personality types can be developed through educational interventions. For example, does sales training develop extraversion? Do creativity exercises designed to expand the imagination increase intuition? This information is

important for the design of learning activities for self-employment development.

Further qualitative research is needed to deepen the understanding of the characteristics of successful entrepreneurs and their learning preferences.

Successful entrepreneurs may be able to offer suggestions for developing the processes which lead to success.

### Conclusion

This study was aimed at determining whether self-directed learning readiness and personality type were related to success in self-employment. Chapter one introduced the problem and the rationale for this investigation. Chapter two involved a review of the literature, including self-directed learning, Jungian theory of personality type, and self-employment and entrepreneurial characteristics. Chapter three described the methodology used to complete the study including research design, sample, instrumentation, procedures and data analysis. A mixed design was used including correlations, frequency distributions, t-tests, and qualitative research. The sample included 185 participants of self-employment programs designed to prepare unemployed individuals to develop their own business initiatives. Data were collected using the SDLRS and the PET Type Check. Interviews were conducted with a select sample of ten subjects to discuss their self-directed activities and success in self-employment. In Chapter four, results of the study were presented, including means, standard deviations, Pearson correlations, frequency distributions, and t-tests. This final chapter

discussed the results and their implications for practice and theory. The field of self-employment is young and thriving. There is tremendous need for empirical research to validate selection processes for self-employment programs, and to ensure that training and consulting activities are undertaken with a clear understanding of entrepreneurs' individual learning preferences and personality type. Future prosperity lies in the hands of those who are willing to create and those who are willing to help them.



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## APPENDIX A

## SELF-DIRECTED LEARNING INTERVIEW QUESTIONNAIRE

1. During the past few months, you have been involved in starting a new business venture. Was this initiative voluntary?

yes

no

2. Describe activities which required you to take initiative to learn something new to conduct your business. These activities may have been performed alone or with the help of others.

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3. Did you feel that you were free to think or act as an individual during this experience, or was someone else in control?

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4. Is it important to you to be in control of your own destiny?

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5. How have you changed or grown as a result of starting your own business?

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## APPENDIX B

## SUCCESS IN SELF-EMPLOYMENT INTERVIEW QUESTIONNAIRE

1. How would you rate your success in self-employment?  

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- 2.. Do you feel any differently about yourself as a result of this self-employment experience?  

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3. What does success mean to you?  

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4. To what would you attribute your success?  

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5. How does starting your own business compare to working for someone else?  

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6. If you were just starting out in this business venture, what would you do differently?  

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## APPENDIX C

## RESPONSES TO SELF-DIRECTED LEARNING QUESTIONNAIRE

1. During the past few months, you have been involved in starting a new business venture. Was this initiative voluntary?  
  
Yes 10      No 0
2. Describe activities which required you to take initiative to learn something new to conduct your business. These activities may have been performed alone or with the help of others.
  - i) Doing our business plan. Initiating trade shows. We talked to people in business. Research. Taking courses. Business insurance.
  - ii) Market research. My research indicated a slow market. I did this alone.
  - iii) Reading newspapers, newsletters, for example, the Chamber of Commerce, the Ministry of Industry, Trade and Technology. Joining associations, networking, print media subscriptions relevant to my business, for example, the Human Resources Reporter.
  - iv) I took extra evening courses at college. Surveys. I improved my pattern-making skills.
  - v) How to start a business with no capital and no access to credit. Meetings with other countries. Networking, chambers, trade representatives. I had to do it on my own. Advertising for jewellery. Learning where to advertise.
  - vi) Bookkeeping and financial in general. Some computer knowledge.
  - vii) Personnel management. Doing a year end. Bookkeeping.
  - viii) Getting the piano. Searching for the best deal. Networking. Getting students. I went from ten when I started to thirty.

- ix) Networking. Finding resource people to do what I wanted. Personal financial steps. Selling myself.
  - x) Getting courses to help me learn about my business, especially financial. Learning discipline. Learning to work with customers.
3. Did you feel that you were free to think or act as an individual during this experience, or was someone else in control?
- i) We were in control [client and wife].
  - ii) I felt in control, but I feel that I get help from external people. It keeps me motivated.
  - iii) Yes.
  - iv) Me, I was in control.
  - v) It was more like a slalom or obstacle course. Plans do not reflect reality of start up. I must rely on myself. I need family approval.
  - vi) I felt in control.
  - vii) Yes.
  - viii) Yes, I was.
  - ix) I was in control.
  - x) I'm in control.
4. Is it important to you to be in control of your own destiny?
- i) Oh yes, definitely!
  - ii) Yes.
  - iii) Yes.
  - iv) Yes.



- v) As far as possible. I try to as much as I can but no-one is ever 100 percent in control.
- vi) Yes, 100 percent.
- vii) Yep.
- viii) Very important, absolutely!
- ix) No, I feel a higher power is in control.
- x) Oh yes, you don't know how much!

5. Have you changed or grown as a result of starting your own business?

- i) Oh yes. I'm not afraid to try something new. I'm out there more. And more confident.
- ii) I really feel like it certainly is still brewing and I feel I have changed and grown a lot. I grew a lot on a personal level.
- iii) Greater self-sufficiency. More persistence. Acceptance of my own limitations. My perspective of business has changed.
- iv) Yes, I have to really have complete control over my time with four kids. Time is very important.
- v) There was a steep learning curve, and it never stops. I've been going through this for six years.
- vi) Very much. I learned what I was lacking and identified my strengths and that there are a lot of great people in my life.
- vii) I guess. I'm experienced now.
- viii) I'm much more independent. I'm getting lots of referrals.
- ix) My self-esteem and confidence increased.

- x) Developing my abilities. I can't believe the respect I have out there. I am somebody! I didn't know who I was until now.

## APPENDIX D

## RESPONSES TO SUCCESS IN SELF-EMPLOYMENT QUESTIONNAIRE

1. How would you rate your success in self-employment?
  - i) Very good. We're still at it.
  - ii) I can't rate it high. But there are other factors too. I had a baby. My husband was also changing careers.
  - iii) Moderate.
  - iv) It's happening the way I want it to. It's a repeating adventure. I'll know better in six months.
  - v) Not terribly high as far as income, but the fact that I can publish is good. I'm new and unproven.
  - vi) Successful in terms of work satisfaction, very successful. Financial, I'm not there yet.
  - vii) Absolutely successful!
  - viii) I'm getting there. I tripled activity over the year. I'm just about at my peak without hiring other people.
  - xi) Right from the beginning I felt I had a successful idea. I'm won't feel that I'm totally successful until I'm financially secure.
  - x) A+
2. Do you feel any differently about yourself as a result of this self-employment experience?
  - i) More confident
  - ii) I really do. I feel like its contributed alot to some personal growth, confidence, and alot of knowledge. This program was no comparison to any other courses I've ever taken. This is much

better.

- iii) I have a better sense of my own abilities and value. I have my down times too.
- iv) No. I'm the same old me.
- v) Yes, although I don't know exactly how. Both positive and negative. It's hard work. I used to be afraid to pick up the phone and now I'm coming out of that. The respect part is tough.
- vi) I have a greater sense of self-confidence.
- vii) No.
- viii) I'm more independent.
- ix) I feel I have become a more thankful person. I found my niche.
- x) I feel like someone. I have tremendous self-respect.

3. What does success mean to you?

- i) Being able to control where you want to be.
- ii) Being happy. Monetary plays a factor but that [being happy] is the ultimate goal.
- iii) Being busy and getting paid. Fully occupied in paid endeavours.
- ix) I'm striving to make enough money to make me happy. To be self-sufficient.
- v) I don't know yet. Success is more how you feel about yourself. I always trusted myself more than anyone else.
- vi) Success is measured at two levels. The first is financial and the second is being satisfied with work and doing what I love.
- vii) Making \$100,000 clear a year.

- viii) Being happy, healthy, enjoying what you do. Money is not as important.
- ix) Being at peace with everything. Having goals.
- x) I am a great success. There are many things involved. Self-respect is number one. Now I can see myself making money.

4. To what would you attribute your success?

- i) Not giving up. Even when things looked bleak. There's another way.
- ii) Knowledge and hard work.
- iii) Years of experience. Professionalism. Personal attributes. Thoroughness. Integrity. Persistence.
- iv) Hard work and time management.
- v) Patience. Myself. What I do.
- vi) My fiance worked to help me. My creative mind. My upbringing. My education.
- vii) Hard work and persistence.
- viii) Surrounding myself with the right people. The education process I was exposed to. Perseverance.
- ix) Faith and Christianity.
- x) I made lessons fun. Word-of-mouth referrals. It's important to make the experience personal.

5. How does starting your own business compare to working for someone else?

- i) You have much more freedom to come and go when you want.

More responsibility.

- ii) The outcomes are more. You feel them more. They're more meaningful.
  - iii) It just doesn't. The flexibility, responsibility. I must believe in what I'm doing.
  - iv) It's harder. It's less free time. You live the job. Everything is tied into work. I find myself relating everything to the business.
  - v) No comparison. It's easier to work for someone else. If I went back to working for someone else, it would be different. You can bring a lot of things to the employment situation that you didn't before.
  - vi) It doesn't. Everything is on your shoulders. It's more rewarding that's for sure. It's so much better.
  - vii) It doesn't compare at all. You have total control.
  - viii) It's much better. The flexibility is great.
  - xi) It's the difference between hating something and now I don't like weekends because people aren't working.
  - x) There's no comparison. I'm much happier.
6. If you were just starting out in this business venture, what would you do differently?
- i) Not much. It was all worth it. It was all learning.
  - ii) The course was an excellent start. Probably not having a family at the same time.
  - iii) Hire staff immediately rather than waiting.
  - iv) I'd move faster.
  - v) I don't know what I could do differently.

- vi) More start up capital. Networking a bit harder. I wouldn't have procrastinated.
- vii) I'd probably borrow more start up capital. I would have planned a bit better based on marketing.
- viii) I would have bought a keyboard instead of a piano or an older upright. I'd do more work in my home instead of travelling so much.
- xi) I would have a better marketing plan. Fewer numbers of publication. Earlier, I would spend money on consultants. I would hire staff earlier.
- x) I'm very patient. I wouldn't change anything. You can't give up.